

DOCUMENT RESUME

ED 059 678

HE 002 844

TITLE Goals for Higher Education to 1980. Volume I: Discussion and Recommendations and Summary.

INSTITUTION South Carolina Commission on Higher Education, Columbia.

PUB DATE Jan 72

NOTE 244p.

EDRS PRICE MF-\$0.65 HC-\$9.87

DESCRIPTORS Educational Economics; *Educational Improvement; *Educational Planning; Educational Quality; *Higher Education; *Improvement Programs; Private Colleges; Public Education; Public Schools; *Statewide Planning

ABSTRACT

This report addresses itself to the entire spectrum of postsecondary education in South Carolina and considers goals and objectives at this level for the decade of the 1970's. It is concerned with the higher education structure, programs, financial aspects of higher education, building needs, and the relationship between public and private institutions of higher education. The State's system of higher education seeks to fulfill the following goals: (1) to provide the opportunity for learning beyond the secondary school level for all who seek it; (2) to reduce the socioeconomic barriers to higher education; (3) to improve the efficiency of higher education; (4) to improve the quality of higher education; (5) to encourage research and creativity within higher education; (6) to better utilize the resources of higher education in public service; (7) to sustain among the citizens of the State an appreciation for the accomplishments of higher education and an understanding of its commitment to improve the quality of life; and (8) to preserve a strong nonpublic sector of higher education. (Author/HS)

**SOUTH CAROLINA COMMISSION
ON HIGHER EDUCATION**

**Goals for Higher Education
to 1980**

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY.

Volume I

Discussion and Recommendations

**Columbia, South Carolina
January, 1972**

SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION

Appointed by The Governor

E. CRAIG WALL, Chairman (1973)
Box 830, Conway, S. C. 29526

JOHN K. CAUTHEN (1975)
2407 Wheat Street, Columbia S. C. 29205

ALESTER G. FURMAN, III (1974)
Daniel Building, Greenville, S. C. 29601

HUGH M. CHAPMAN (1975)
Jefferson Square, Columbia, S. C. 29201

R. CATHCART SMITH (1974)
903 Bell Street, Conway, S. C. 29526

T. EMMET WALSH (1973)
Box 5156, Spartanburg, S. C. 29301

FRED R. SHEHEEN (1975)
Camden Chronicle, Camden, S. C. 29020

Ex Officio Members

WILLIAM H. GRIER (Winthrop)
Box 935, Rock Hill, S. C. 29730

COLONEL J.M.J. HOLLIDAY (Citadel)
Galivants Ferry, S. C. 29544

ALEX M. QUATTLEBAUM (Clemson)
Florence, S. C. 29501

T. ESTON MARCHANT (USC)
1306 Main Street, Columbia, S.C. 29201

HARRISON L. PEEPLES (MUSC)
Estill, S. C. 29918

**JAMES A. ROGERS (State College
Board of Trustees)**
Florence Morning News, Florence, S.C.
29501

I.P. STANBACK (S. C. State College)
2638 Two Notch Road, Columbia, S.C.
29204

COMMISSION STAFF

JAMES A. MORRIS
Commissioner

FRANK E. KINARD
Assistant Commissioner

WILLIAM C. JENNINGS
Assistant Commissioner

JAMES R. MICHAEL
Assistant Commissioner

ALAN S. KRECH
Planning Officer

M. HURST MARSHALL
Executive Assistant

ELIZABETH T. JUMPER
Administrative Assistant

ANNE F. IRELAND
Accounting Clerk

JUDI R. TILLMAN
Secretary

LUCY J. WOMACK
Clerk Typist

NEILL W. MACAULAY
Regional Education Board

REBECCA M. CONNELLY
Regional Education Board

**SOUTH CAROLINA COMMISSION
ON HIGHER EDUCATION**

GOALS FOR HIGHER EDUCATION TO 1980

VOLUME I

Discussion and Recommendations

January, 1972



SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION

RUTLEDGE BUILDING
1429 SENATE STREET
COLUMBIA, S. C. 29201

JAMES A. MORRIS
COMMISSIONER

January 10, 1972

TELEPHONE
803/758-2407

TO: His Excellency, Governor John C. West, Chairman, State Budget and Control Board and the Members of the South Carolina General Assembly

Act No. 194 (1967) establishing the Commission on Higher Education charged the Commission with the duty of making studies of the state's institutions of higher education relative to both short and long range programs, and specified a broad spectrum of subjects which should be included. Acting under this mandate, in June 1970, the Commission initiated a major planning effort to produce a statement of goals for higher education in South Carolina and to provide guidelines within which all segments interested in post-secondary education could work together for the common good.

The results of this planning effort are hereby forwarded for your consideration. Volume I presents the essential facts, discussion, and recommendations; a summary of Volume I has been prepared as a separate publication. Volume II, available on request, includes reports as submitted by various committees appointed by the Commission which were source documents for Volume I.

The Commission and staff stands ready to assist you in any way during your consideration of this document.

Yours sincerely,

A handwritten signature in dark ink, appearing to read "E. Craig Wall, Sr.", is written over a horizontal line.

E. Craig Wall, Sr.
Chairman

CONTENTS

		Page
	<u>LETTER OF TRANSMITTAL</u>	ii
	<u>INTRODUCTION</u>	1
	<u>LIST OF RECOMMENDATIONS</u>	3
I.	<u>GOALS IN HIGHER EDUCATION</u>	13
II.	<u>ENROLLMENTS AND ADMISSIONS</u>	27
	Assumptions governing enrollment projections, 27	
	Methodology of projections, 28	
	Projections of enrollments, 29	
	Age-group method, 29	
	Institutional goals, 30	
	Modified age-group method, 30	
	Enrollment comparison between U.S. and S.C., 31	
	Projections by institution, 34	
	Projections for technical education centers, 34	
	Admissions policies, 36	
	Current practices, 36	
	Comparison of mean scores of high school seniors on SAT, S.C. and U.S., 37	
	Comparison of mean scores of college freshmen, S.C. and U.S., 38	
	Comparison of mean SAT scores, 1970-71, freshmen enrolled at public institutions, 39	
	Recommendations as to admissions policies, 40	
	Transfer credit, 41	
	College credit earned outside the college classroom, 42	
	College day programs, 45	
III.	<u>ACADEMIC PROGRAMS</u>	59
	Institutional objectives for the decade, 60	
	New Bachelor's degree programs proposed by the public institutions, 1970-1980, 61	
	New Master's (and First Professional) programs proposed by the public institutions, 1970-1980, 62	
	New "Master's plus 30" certificate programs proposed by the public institutions, 1970-1980, 63	
	New Doctorate programs proposed by the public institutions, 1970-1980, 63	

	Page
Mission of the institutions, 66	
The universities, 66	
The state colleges, 68	
Two-year post-high school program, 71	
IV. <u>FINANCING HIGHER EDUCATION</u>	73
State support of higher education, 74	
Tuition and fees, 76	
Comparative revenue sources, 79	
Current level of state appropriations, 82	
Full time equivalent enrollments, 85	
Appropriations per student, 86	
Present method of determining appropriations for public colleges and universities, 87	
An improved method of determining appropriations for public colleges and universities, 88	
Student/faculty data comparisons, 89	
How will S.C. public higher education be financed in the 1970's?, 91	
Comparative analysis of expenditures, 94	
Faculty salaries, 95	
Appropriation Formula, 99	
V. <u>CAPITAL IMPROVEMENTS</u>	103
Requirements for nonresidential facilities, 104	
Construction, 105	
Land acquisition, 107	
Campus development, 107	
Renovations, 108	
Special costs, 108	
Requirements for the Medical University, 113	
Financing capital construction, 116	
Federal assistance, 116	
State institution bonds, 117	
State Capital Improvements Bond Act, 119	
VI. <u>FACULTY</u>	123
Evaluation, 123	
Recruitment, 124	
Academic advising, 127	
Fringe Benefits, 127	
Retirement program, 129	
Major medical, disability income, and travel insurance, 130	
Outside work and political activity, 131	
Faculty and governance, 131	
Tenure and promotion, 132	

	Page
VII. <u>STUDENT AID</u>	135
The need for financial assistance, 135	
Aid to sectarian institutions, 137	
State-funded grant program, 138	
The Guaranteed Student Loan Program, 140	
Grants for out-of-state education, 141	
Coordination of aid programs, 142	
VIII. <u>LIBRARIES</u>	145
Physical facilities, 145	
Financial support, 146	
Library holdings, 149	
Government documents, 151	
Archives, 152	
Personnel, 152	
Use of libraries, 154	
Interlibrary cooperation, 155	
The College of Charleston and the Medical University, 155	
The Charleston Consortium of Libraries, 156	
The S.C. State Library Interlibrary Teletype System (SCILTEL), 156	
The S.C. State Library microfilming project, 157	
Interlibrary loan cooperation among the State colleges, 157	
Cooperation among private college libraries, 158	
IX. <u>CONTINUING EDUCATION AND PUBLIC SERVICES</u>	171
The scope of continuing education, 172	
A long-range objective, 173	
A system of coordination, 173	
Educational television, 174	
Independent study courses and proficiency examinations, 176	
Innovative curricula, 177	
Transfer of credit, 177	
Funding, 178	
The scope of public services, 178	
Support for public services, 179	
X. <u>TWO-YEAR POST-HIGH SCHOOL EDUCATION</u>	181
The university branches and centers, 181	
Technical education centers, 183	
Two-year post-secondary facilities, 185	
Enrollments, 185	
Fiscal support, 186	
XI. <u>MEDICAL EDUCATION</u>	195

	Page
XII. <u>NONPUBLIC HIGHER EDUCATION</u>	199
The role and scope of private sector, 200	
Enrollment, faculty, and finances, 201	
Elimination of the constitutional barrier, 204	
The Tuition Grants Program, 204	
XIII. <u>COMMISSION ON HIGHER EDUCATION</u>	209
<u>LIST OF TABLES</u>	216
<u>LIST OF FIGURES</u>	219

State of South Carolina
Post-Secondary Institutions

<u>PUBLIC</u>		<u>President or Director</u>	<u>Opening Enrollment Fall, 1971</u>
<u>Institution</u>	<u>Founded</u>		
1. University of South Carolina	1801	Thomas F. Jones	13,381
2. Medical University	1823	William M. McCord	1,032
3. The Citadel	1842	James W. Duckett	2,141
4. Winthrop College	1886	Charles S. Davis	3,340
5. Clemson University	1889	Robert C. Edwards	7,293
6. South Carolina State College	1896	M. Maceo Nance, Jr.	1,820
7. College of Charleston	1970	Theodore S. Stern	1,012
	(1770 - Private)		
8. Francis Marion College	1970	Walter D. Smith	1,075
<u>USC Branches and Centers</u>			
9. Beaufort (Center)	1959	Darwin B. Bashaw	125
10. Lancaster	1959	Francis A. Lord	415
11. Coastal Carolina	1960	Edward M. Singleton	450
12. Aiken	1961	William C. Casper	572
13. Salkehatchie (Center)	1965	Carl A. Clayton	149
14. Union	1965	John Casoria	201
15. Spartanburg	1967	Norbert A. Stirzaker	510
16. Midlands	1967	Nicholas P. Mitchell	799
<u>Clemson Centers</u>			
17. Greenville	1966	Frank L. Day	190
18. Sumter	1966	Jacob C. Anderson, Jr.	187
<u>Technical Education Centers</u>			
19. Greenville	1962	Thomas E. Barton, Jr.	1,334
20. Midlands	1963	R. L. Grigsby, Jr.	1,127
21. Spartanburg	1963	Joe D. Gault	617
22. Sumter	1963	William Cecil Walters	357
23. Tri-County	1963	Jacob D. Salley	408
24. Berkeley-Charleston-Dorchester	1964	William Whitman	785
25. Florence-Darlington	1964	Fred C. Fore	720
26. York	1964	Baxter Hood	412
27. Horry-Georgetown	1966	G. William Dudley, Jr.	393
28. Piedmont	1966	Lex Walters	385
29. Orangeburg-Calhoun	1968	Charles P. Weber	703
30. Chesterfield-Marlboro	1969	Thomas J. Ford	218
31. Aiken	1971	Ashley J. Little	0

Regional Technical Centers

32. Columbia Regional Technical Ctr.	1947	Charles T. Minshew	-
33. Denmark Regional Technical Ctr.	1947	William L. McDuffie	-
34. Regional Tech. & Manpower Ctr.	1947	M. B. Robinson	-
35. Beaufort Regional Technical Ctr.	1968	Louis A. Holliday	-
36. Williamsburg Regional Manpower Training Center	1969	Lester Harmon	-

NONPUBLIC

37. Furman University	1825	Gordon W. Blackwell	1,908
38. Lutheran Theological So.Seminary	1830	Hugh G. Anderson	-
39. Erskine College	1839	Joseph Wightman	727
40. Limestone	1845	Melvin S. Bell	517
41. Columbia College	1854	R. Wright Spears	883
42. Wofford College	1854	Paul A. Hardin, III	1,008
43. Newberry College	1856	Frederick B. Irvin	796
44. Claflin College	1869	H. V. Manning	772
45. Allen University	1870	J. W. Hairston	440
46. Benedict College	1870	B. F. Payton	1,469
47. Lander College	1872	E. Don Herd, Jr.	777
48. Presbyterian College	1880	Marc C. Weersing	822
49. Converse College	1889	R. T. Coleman, Jr.	741
50. Coker College	1894	Gus Turbeville	388
51. Voorhees College	1897	Harry P. Graham	736
52. Central Wesleyan College	1906	C. R. Cikman	320
53. Morris College	1908	H. E. Hardin	518
54. Columbia Bible College	1923	J. Robertson McQuilkin	524
55. Bob Jones University	1927	Bob Jones, Jr.	3,288
56. Baptist College	1965	John A. Hamrick	1,227
57. Friendship Junior College	1891	James H. Goudlock	201
58. North Greenville Jr. College	1892	Harold Eugene Lindsay	582
59. Clinton Junior College	1894	Sallie Moreland	170
60. Anderson College	1911	John E. Rouse	812
61. Spartanburg Junior College	1911	James S. Barrett	1,007
62. Palmer College, Charleston	1954	Charles E. Palmer	- 1
63. Palmer College, Columbia	1957	Charles E. Palmer	822
64. Southern Methodist College	1956	Julian B. Gamble	35

1- Included in Columbia campus total.

INTRODUCTION

Section 2 of Act 194 (1967) establishing the Commission on Higher Education states:

the Commission "..... is charged with the duty of making studies of the state's institutions of higher learning relative to both short and long-range programs which shall include:

(a) the role of state-supported higher education in serving the needs of the state and the roles and participation of the individual institution in the state-wide program"

To fulfill this legislative mandate, in June 1970 the Commission initiated a major planning effort designed to produce a statement of goals for higher education in South Carolina and to provide guidelines within which all segments of the state interested in post-secondary education can work together for the common good. Overall direction of the project was given to a Steering Committee, chaired by then Commission Chairman Robert M. Vance and including Presidents Gordon M. Blackwell of Furman University, Charles S. Davis of Winthrop College, Maceo M. Nance of South Carolina State College; Commission member E. Craig Wall and Commissioner James A. Morris.

The Steering Committee agreed unanimously that such an important undertaking must include meaningful participation by the state's institutions of higher education, both public and nonpublic. Each public institution of higher education was requested to submit a "Statement of Goals"; the responses were excellent and contributed significantly to this project. A number of committees were appointed, each to consider an aspect of higher education and submit a report. The membership of these committees reflected wide representation from the state's institutions and agencies concerned with post-secondary education. The reports of the committees, which are presented in Volume II, were basic

sources of information in drafting this document. The draft was referred to the institutions for comment, and their suggestions were considered.

Pertinent literature dealing with higher education, such as the excellent series of reports issued by the Carnegie Commission on Higher Education, was considered. Individual committee reports in Volume II and chapters of this Volume identify some of the more useful documents.

Many individuals contributed unstintingly of their time and talent to this project and there is no question that the merits of this document derive to a large extent from their efforts. Financial support was provided in part by federal grants under the Higher Education Facilities Comprehensive Grants Program; this support was valuable and it is gratefully acknowledged.

The results are presented in this Volume; the responsibility for material presented lies solely with the Commission on Higher Education. It is not intended that the ideas presented be inflexible, but rather that modifications be made when indicated. It is the objective of the Commission to subject the entire document to formal review at least once every two years.

James A. Morris, Commissioner

LIST OF RECOMMENDATIONS

The following recommendations are developed in the text. The Chapter and page number are indicated for each.

It is recommended:

II. Enrollments and Admissions

1. that enrollment maxima be established at both Clemson University and the University of South Carolina, specifically that Clemson University limit main-campus headcount enrollment to no more than 10,000, and the University of South Carolina no more than 18,000 by limiting freshmen enrollment to 2500; and that both institutions maintain these limits by more rigorous admissions criteria at the undergraduate level (p. 34);
2. that the admissions criteria for main campus admissions to baccalaureate degree programs at the two senior universities be increased relative to those in state colleges (p. 40);
3. that the admissions criteria for the senior universities' branches and centers be reduced below present criteria and below those obtaining for the state colleges, so as to encourage a broader spectrum of abilities and aptitudes among applicants; it being presumed that remedial curricula not carrying baccalaureate-level credit will be made available to those students admitted under such reduced standards (p. 40);
4. that the admissions criteria for nonresidents at all public colleges and universities be increased relative to those obtaining for South Carolina residents, but that specific quota allocations be avoided (p. 41);

5. that a firm policy be adopted by all public institutions permitting any student to transfer credits, up to the ~~maximum~~ permitted by then existing accrediting association policy, between public institutions, provided only that the cumulative grade point ratio of the transferred block of such credits be 2.0 or better on a 4.0 scale; and without reference to existence of similar courses in the institutions to which credit is transferred (p. 41);
6. that credits earned toward the Associate in Applied Science degree from accredited Technical Education Centers be accepted for transfer to the public colleges and universities under the same conditions, regulations and procedures as from other accredited institutions of higher education, and that non-comparable college-level technical courses be accepted for transfer as electives (p. 41);
7. that high schools or combinations of high schools offer each year a complete spectrum of curricula appropriate to the College Entrance Examination Board's Advanced Placement Program (p. 42);
8. that all public institutions of higher education formally subscribe to the Advanced Placement Program, allowing full credit for courses with acceptable grades presented by candidates (p. 43);
9. that each public institution adopt and publicize a policy of admitting students as regular freshmen who by the end of the eleventh grade have accumulated the requisite secondary units with appropriate grades and with appropriate standardized test (SAT) scores (p. 43);
10. that each public institution publicize and make more readily available regular freshman courses to twelfth-grade students on a "special-student" basis, regular credits earned as such to be credited to the

student on admission, or available for transfer to any other accredited institution on an official transcript (p. 43);

11. that all public institutions of higher education offer full credit for candidates presenting acceptable grades on tests given under the College Level Examination Program, and that all make available to applicants the CLEP battery of tests (p. 44);
12. that all public institutions of higher education grant full credit for those United States Armed Forces Institute courses completed with satisfactory grades (p. 44);
13. that all public institutions of higher education grant credit for experience in military service when it can be shown to be equivalent to college courses (p. 45);

III. Academic Programs

14. that the statutory authority creating the Commission be amended to authorize the Commission to withdraw approval of existing programs which are shown to be unnecessarily duplicative, unsufficiently productive, or no longer required (p. 65);
15. that the restrictions on males attending Winthrop be removed and that men be admitted to the College on a commuting but otherwise co-equal basis (p. 70);
16. that a Graduate Center be formed in Charleston, with details to be developed by the Charleston Consortium Steering and Policy Committees for submission to the Commission for approval; (p. 71);

IV. Financing Higher Education

17. that for 1973-74 and subsequent years, improved versions of the Appropriations Formula become the primary basis for determining the amount of state support to be received by the state colleges and universities (p. 90);
18. that there be greater standardization of tuition and fee schedules among the universities and colleges (p. 91);
19. that changes in tuition and fee levels subsequent to final appropriation in accordance with the Appropriation Formula, require approval of the Commission and the Budget and Control Board (p. 91);
20. that the colleges and universities be exempted from preparing appropriation requests in the current manner (p. 91);

V. Capital Improvements

21. that the State Capital Improvements Bond Act be amended to provide an additional \$50 million by 1975 for the public institutions of higher education (p. 119);

VI. Faculty

22. that each institution utilize an objective evaluative instrument on a periodic basis to determine faculty effectiveness; that in the development of this instrument faculty and administrators reach consensus in regard to the criteria to be employed; that student evaluation of instructors in terms of the instructors' effect on the student be a part of the criteria; and that these evaluations be used in conjunction

with other criteria to determine merit increases, promotions, and tenure (p. 124);

23. that each public institution through the joint efforts of administration and faculty develop policies and procedures designed to assist recruitment of qualified faculty (p. 127);
24. that there be increased emphasis on academic advising of students at all institutions and the faculty accept academic advisement as a part of their assignment (p. 127);
25. that legislation be enacted which would offer faculty members at public institutions the option of participating in the Teachers Insurance Annuity Association-College Retirement Equity Fund (TIAA-CREF) or the South Carolina Retirement Program (p. 130);
26. that the State Personnel Division prepare a uniform package program covering medical, disability and travel insurance, and that the state pay some portion of the premium cost for this coverage for all full-time faculty members (p. 130);
27. that all public institutions prepare written guidelines on political activity and outside work and that applicants for faculty positions be provided these guidelines (p. 131);
28. that the faculty of the department be actively involved in determining budget recommendations of that department; that faculty have the opportunity to recommend individuals for the positions of department head, academic dean, and president; and that all institutions permit representatives from the faculty (and from the student body) to attend meetings of boards of trustees (p. 132);
29. that each institution develop written policies on tenure and promotion and make these policies known to all parties concerned (p. 133);

VII. Student Aid

30. that the State Constitution be revised to remove the prohibition against indirect aid to sectarian institutions (p. 137);
31. that a state-funded program of non-repayable grants to needy undergraduate students be established (p. 138);
32. that such a generally available grants program supplant the existing Tuition Grants Program which is more restrictive in scope (p. 140);
33. that the Education Assistance Authority provide for student loans at an annual lending level of at least \$2.5 million (p. 140);
34. that the ongoing program of state grants to students electing to go out of state in furtherance of their education be revised and strengthened (p. 141);
35. that all state-level administrative and fiscal responsibility for these new programs of student aid reside with the Commission (p. 142);

VIII. Libraries

36. that the General Assembly enact special appropriations of \$1.5 million per year for the remainder of the decade for library purposes, to cover all state supported institutions of higher education (p. 149);
37. that institutions ensure that financial support is available to procure library holdings in adequate number (p. 151);
38. that South Carolina adopt a Documents Depository Law which will provide for the collection, listing, and distribution of state publications to designated depository libraries around the state (p. 152);
39. that institutions develop formal policies and procedures for retaining written material of potential historical importance (p. 152);

- 40. that institutions ensure that financial support is available to employ well-trained library personnel in adequate numbers at competitive salaries (p. 153);
- 41. that institutions stimulate greater use of their library resources (p. 154);
- 42. that institutions increase inter-library cooperation and expand the categories of personnel benefitting from such cooperation (p. 158);

IX. Continuing Education and Public Services

- 43. that immediate priority be given to the development of pilot programs to provide, via ETV, credit courses which are needed by the teachers of this state to maintain certification (p. 174);
- 44. that concurrent development of a broadcast (open circuit) pilot program be accomplished to ascertain the interest in and demand for freshmen and sophomore level credit courses offered via ETV (p. 175);

X. Two-Year Post-High School Education

- 45. that a new State Board be created to replace the State Committee for Technical Education, and that the Chairman of that new Board be empowered to sit ex officio as a member of the Commission on Higher Education, and that the new Board bear the same relationship to the Commission on Higher Education as do senior college and university Boards (p. 188);
- 46. that the new Board assume the governance of all existing institutions operated by the State Committee for Technical Education, but not the University Branches and Centers (p. 188);
- 47. that having established criteria for the establishment of new, and the continuation of existing two-year institutions, the new Board may seek

the approval of all the necessary authorities, where a local need exists, to create comprehensive institutions either by the addition of lower-division college curricula to Technical Education Centers, or by merging two or more public two-year institutions, or by the addition of occupational and vocational curricula to a University Branch or Center (p. 189);

XI. Medical Education

48. that Regional Health Education Centers be developed as expeditiously as possible (p. 196);
49. that the number of students accepted in the first year classes at MUSC be limited to the ability of MUSC to provide the necessary number of teaching beds under its control (p. 197);
50. that a medical education supervisory mechanism ideally under the Commission on Higher Education be established (p. 197);

XII. Nonpublic Higher Education

51. that cooperative arrangements between public and nonpublic sectors of higher education be encouraged and that cooperative arrangements between institutions in the nonpublic sector be expanded (p. 201);
52. that the Tuition Grants Act of 1970 be funded at a level of \$200,000 for 1972-73 and that the level be increased to \$400,000 per year for 1974-75 and thereafter until such time as a less restricted state grants program be established, to assist the four institutions now eligible for assistance (p. 204);

XIII. Commission on Higher Education

53. that the statutory authority creating the Commission be amended to provide that the number of members appointed by the Governor shall always exceed by one the total number of ex officio members (p. 211);
54. that the statutory authority creating the Commission be amended to establish a Committee of Nonpublic College Presidents as an advisory body for the Commission (p. 211);
55. that the statutory authority creating the Commission be amended to provide for submission of the budgets of public institutions of higher education initially to the Commission, for the Commission to hold open hearings on the budgets and for the Commission to make budget presentations to the Budget and Control Board and the General Assembly on behalf of all institutions (p. 212); and
56. that the statutory authority creating the Commission be amended to require that all requests for capital improvements from public institutions of higher education initially be submitted to the Commission for review and transmittal to the Budget and Control Board (p. 213).

CHAPTER I
GOALS IN HIGHER EDUCATION

Introduction

South Carolina's system of higher education has evolved over the years to meet the changing needs of people in our society. A wide variety of programs is offered through a comprehensive public network of two-year centers for college parallel and technical education, regional colleges, and universities. Private colleges complement the activities of public institutions, and have historically made significant contributions in terms of quality of programs and numbers of graduates.

Great progress has been made during the decade of the 1960's in higher education in the state as to both quantity and quality of output. Enrollment in post-high school education has increased from 31,540 in 1959-60 to 63,690 in 1969-70. Undergraduate degrees awarded in 1959-60 were 4,160 as compared to 7,870 in 1969-70. The number of master's degrees awarded annually during this period increased by 164% and the number of doctor's degrees by 720%. Research funds available at the University of South Carolina and Clemson University rose sharply during the decade. A much wider variety of programs at the post-high school level is now offered at the undergraduate and graduate levels, including graduate programs in dentistry, social work, engineering and the physical sciences, the humanities and the social sciences. Continuing education programs have expanded greatly and a start has been made in the use of new media such as educational television. During this decade both the technical education system and the regional campus system have provided greatly improved opportunities for occupational and college parallel education at the two-year level.

Nevertheless, South Carolina has a smaller proportion of the college-age group in institutions of higher learning than almost any other state.

The attrition rate at the college level is high enough to indicate that resources are being wasted and that individual career objectives are being thwarted. Insufficient opportunities are being provided not only for recent high school graduates but also for adults who desire to enjoy college learning experiences while they continue their jobs. Moreover, professional and business people are not being adequately served with meaningful programs.

This report addresses itself to the entire spectrum of post-high school education in South Carolina and considers goals and objectives at this level for the decade of the 1970's. It is concerned with the higher education structure, programs, financial aspects of higher education, building needs, and the relationship between public and private institutions of higher learning. Inherent questions to be considered are these: who should go to college, what programs should be offered, and who should pay the costs of higher education.

It is important that parts of this report not be considered out of context. It endeavors to examine and submit recommendations concerning the total problem of providing the best quality of post-secondary education for a maximum number at minimum costs. The reviewer is urged to bear in mind the totality of the endeavor and to consider specific recommendations in the light of all other relevant material presented.

Statement of Goals

Evaluation of the adequacy of the state's higher education system must occur on the basis of the objectives to be achieved. In essence, higher education exists to provide opportunities for individuals to develop their intellectual capacities more effectively and to meet the needs of society for educated and trained personnel.

More explicitly, the institutions of higher education were created to meet needs of the people of South Carolina, and are sustained for the direct purpose

of providing the programs and services that respond to the requirements of South Carolinians. The state's system of higher education is dedicated to fulfilling the hopes and aspirations of the citizens of the state and to that end seeks the following goals.

The primary goal of higher education is to provide the opportunity for learning beyond the secondary school level for all who need and seek it. The system must include a diversity of programs to meet a wide range of needs; it must emphasize the transfer of knowledge but be undergirded with a sense of responsibility for the development of moral, spiritual and aesthetic values. The objective of learning is the development of essential knowledge, skills, attitudes and values necessary to live effectively in a democratic society.

It is a goal to reduce the socio-economic barriers to higher education to ensure that the benefits of post-secondary training are not denied because of social environment or economic status. The issue is not one of lowering standards, which must be maintained, but rather one of extending special programs to those with potential to help them meet standards.

It is a goal to improve the efficiency of higher education as measured by the effective use of resources. The rising costs of higher education demand increased effectiveness in management at all levels and better accountability for the tax dollar. Maximum efficiency does not imply any decrease in the quality of education; on the contrary, it is anticipated that increased efficiency will improve quality.

It is a goal to improve the quality of higher education. Quality of higher education is admittedly difficult to measure, but it must be related to teaching and research effectiveness at a particular level. It is possible to have high quality programs for students of normal ability which differ from high quality programs tailored to the needs of the exceptional student. Quality is not necessarily measured only by facilities, faculty, programs or numbers of

graduates, but as a minimum, able teachers and adequate library resources are essential to high quality educational performance. The goal is to support each institution to perform its educational role with quality standards relevant to the assigned mission.

It is a goal to encourage research and creative activity within higher education. Research is an essential element in post-baccalaureate education: it is vital to maintaining the health and vigor of graduate institutions. In fulfilling their educational missions, universities have made important contributions through research. The traditional role of research must be supported and encouraged.

It is a goal to better utilize the resources of higher education in public service. To an unprecedented degree, the state faces challenges and opportunities; how they are met can profoundly affect the future. In building the capability to carry out their primary missions, the institutions have acquired a high level of expertise in a wide variety of fields which has been applied to some degree to the affairs of the state. There must be greater application without significantly detracting from the primary mission of higher education.

It is a goal to sustain among the citizens of the state an appreciation for the accomplishments of higher education and an understanding of its commitment to improving the quality of life. The viability of the system of higher education depends directly on public support - with it, progress is possible; without it, decay is certain. Public support is neither inevitable nor constant. A great sense of pride among South Carolinians in their system of higher education must be developed and maintained. A system of monitoring the output of the goals of higher education should be devised and communicated to the people of South Carolina. The graduates of public and nonpublic institutions should be encouraged to pursue their life's work within South Carolina to contribute toward improving the quality of life for all its citizens.

It is a goal to preserve a strong nonpublic sector of higher education, recognizing the vital contribution made by the state's private institutions and the adverse impact on the state if the load carried by them is significantly reduced. Rising costs are forcing private institutions to effect severe economies in operation and capital improvements to avoid unacceptable increases in tuition. At the same time public funds are being made available for essential operations and physical plant improvements at the public institutions. As the disparity in programs, physical plant, and tuition between the two systems grows, more and more students will inevitably turn to the public institutions. The goal is to maintain a reasonable share of total enrollments in higher education in the nonpublic institutions and to assist private institutions in every legal manner in order that they may carry out their missions more effectively.

In the pursuit of these goals, higher education in South Carolina will not isolate itself from the programs of the region and the nation. On the contrary, the institutions will actively participate in these programs, making a contribution where appropriate while drawing the dividends that may accrue from participation. But emphasis will remain on serving the people of South Carolina, on building strong institutions that meet the needs of the state.

The essential elements of a workable structure of higher education already exists in the state, with two-year institutions, state colleges, and three universities serving general, technical and health needs--a three-tier system. The role of the universities is to offer professional and graduate programs of the highest quality, also emphasizing research and public service and undergraduate programs for students with above-average potential. The state colleges provide basic liberal arts and science programs and a limited range of professional programs, usually including education and business administration. Graduate work should be offered only at the master's level, in specialized areas such as

education, and usually of a continuing education nature. State colleges should be open to those high school graduates who have demonstrated a reasonable ability to perform college-level work. The teaching role of the two-year institutions is twofold: to provide a wide range of occupational programs related to society's needs, and to offer two-year college parallel programs within commuting distance of as high a proportion of high school graduates as can be reached within the state's financial ability to support them. Students should be admitted to the two-year institutions under criteria less stringent than those at state colleges and universities, and remedial curricula should be offered for those students who need to improve their ability to perform satisfactorily in college-level courses. Costs to students at such institutions should be as low as possible.

All public institutions should carry on public service and continuing education functions appropriate to their individual capacities. Colleges are well equipped to provide cultural and general education programs on a community basis, and related evaluation and research should involve the universities.

The Commission on Higher Education's specific role as the coordinating agency for post-high school education in the state requires that its statutory authority be made more adequate as indicated in Chapter XIII of this report. A basic and competent staff has been developed, procedures established, and basic approaches formulated for program evaluation, budgetary analysis and capital requirements analysis for the public colleges and universities. Small additions to the staff are necessary in the student affairs and management information areas, but, in addition, more appropriate delegation and delineation of authority is essential in the areas of budgetary control and permanent improvements coordination. Experience in other states reveals that the alternative to effective coordination is likely to be a governing board, which would restrict the governance of individual colleges and universities.

Summary of This Report

Enrollments and Admissions

It is projected that college enrollments will increase substantially during the decade in South Carolina but that the state shall continue to be below national and regional norms in the proportion of college-age youths in college. Improvement of the two-year higher education systems would undoubtedly move the state closer to such norms of college attendance.

Admissions policies should differ among types of institutions so that in general the best qualified students attend universities. In turn admissions criteria should be higher in the state colleges than in the two-year institutions. Criteria should be higher for nonresidents than for South Carolina residents, but quota systems for out-of-state students should be avoided unless excessive enrollments occur in this group of students.

Credits should be transferable between public institutions and also from accredited technical education centers, provided courses are comparable. All colleges and universities should apply liberal standards in awarding credit for relevant work taken outside the classroom.

Academic Programs

The objective is to provide a wide range of teaching, research and public service programs necessary for personal development of citizens and essential to meet the needs of society for educated and trained people. At the same time proliferation of courses and unnecessary duplication of programs should be avoided, and quality must be constantly emphasized. It is imperative, therefore, not only that new programs of the public colleges and universities be approved by the Commission on Higher Education to achieve these objectives but also that all programs be reviewed periodically to insure that only relevant and needed programs are supported.

Programs should be conducted at each institution on the basis of its assigned role. Doctoral programs and major research efforts should be limited to the universities; and state colleges should offer only limited master's programs, usually of a continuing education nature. Remedial programs should be carried out primarily in two-year institutions, with some effort to meet special needs at some of the state colleges. Whenever feasible, graduate, public service and research programs should involve cooperation between institutions.

Financing Higher Education

Higher education, both in South Carolina and the nation, has become a heavy financial burden, with expenditures rising even faster than the substantial increases in enrollments. The question of "who pays?" is consequently being increasingly emphasized as the burden on parents and taxpayers becomes heavier. The plight of the private colleges, whose expenditures have risen faster than their financial base while faced by competition from subsidized public institutions, is also receiving attention.

It is essential that the increased needs of higher education in South Carolina be met with maximum efficiency. To that end the Commission is recommending a formula budgeting system, continuation and expansion of its management information and cost evaluation system, and improvement in productivity at public institutions. It is anticipated that tuition and fees at public institutions will continue to rise and that increased appropriations will be forthcoming from higher state revenues resulting from economic growth of perhaps 10% per year.

Facilities

The state colleges and universities have conducted extensive building programs during the past decade and are generally in a viable condition in terms of space needs. Specific needs for the decade of the 1970's are for academic space to allow for enlarged enrollments, continuation of construction of basic

campus facilities at Francis Marion College and the College of Charleston, and additional health education facilities.

The facilities can be financed in part through tuition revenues. The balance of the costs should be financed under the general improvement bond program by amending the Capital Improvements Bond Act. A system of evaluation of individual capital projects on a one- and five-year basis has been developed by the Commission on Higher Education. In considering projects for approval careful evaluation will be made not only of the necessity of the space but also of possible utilization of other public facilities.

Libraries

Physical facilities for library use are adequate among most public and private institutions of higher education in the state. As has been realized for some time, however, learning resources in college and university libraries are below norms in comparable institutions in neighboring states. Current financing for library resources must be stepped up and substantial financial support is essential for catch-up purposes.

Considerable effort is also necessary to upgrade library staffs, and to include additional educational and training programs. The new Library School at the University of South Carolina provides a valuable resource and should be adequately supported.

Satisfactory efforts are being made to collect and make available publications of the federal government and a similar system is desirable and should be established for state publications.

Student Aid

There is little doubt that financial restraints represent a significant factor in keeping many capable South Carolinians from college, and thereby explain in part the low college attendance rate of the state. Federal student financial aid programs have closed some of the difference between rising costs

and family resources but there still is a substantial gap to be filled.

To remove financial barriers to higher education requires positive action by the state. Such an effort includes a program of state-funded grants and improvement of the existing state-assisted Guaranteed Student Loan Program and of the system of state grants to students furthering their education in special programs outside the state. The present tuition grants program for students attending private colleges in the state should be greatly strengthened once the prohibition against indirect aid to sectarian institutions in the state constitution is removed.

All state programs of student aid should be formally coordinated through the Commission on Higher Education to provide for greater effectiveness and comprehensiveness.

Faculty

It is recognized that the most important single element in the quality of higher education is faculty effectiveness. In order to recruit, retain and motivate well qualified faculty members, they must be allowed to play an essential role in determination of academic policies and receive compensation and fringe benefits of a competitive nature. Appropriate written policies pertaining to tenure, leave, promotion, role and scope of faculty in governance, etc., must be established and implemented. As set out in Chapter VI, certain adjustments in policy at the institution and state level are needed if these objectives are to be achieved.

Continuing Education and Public Services

Recognition of the fact that education is a lifelong endeavor leads to the necessity by the state of providing higher educational opportunities for citizens of all age levels and educational backgrounds. Such efforts should utilize creative methods to include use of the most modern educational media. This will require a significant expansion of the current activities of public colleges

and universities and more careful coordination at the state level.

The unique and impressive resources of higher education in the state must also be utilized in a variety of ways to raise the whole level of life in South Carolina. Such methods as applied research on public problems, technical assistance to state and private agencies, and encouragement of community involvement in art and music illustrate the wide variety of actions possible. Appropriate budgetary support for public service activities of high priority will serve the public interest very well.

Two-Year Post-High School Education

There is an evident need to expand opportunities for South Carolina high school graduates to attend relatively open admission two-year institutions of higher education if South Carolina is to keep pace with other states in providing higher education opportunities for its people. These two-year centers should be within commuting distance of most high school graduates and within the financial ability of students to pay the fees required. The present systems of regional campuses and TEC centers are serving useful functions but improvement is necessary to broaden opportunities for youth and to improve the state's low rate of college attendance.

A study committee from the Commission and the State Committee on Technical Education has recommended that a comprehensive community college system be established as quickly as possible. The Commission approves this general concept but recommends with the State Committee that this objective be approached by turning over the overall responsibility for two-year post-high school education--except for the present university branches and centers, which would be limited to their present status--to a new Board. The new Board would take over the present functions of TEC and would expand activities based on local needs and within the overall structure of higher education in the state.

Medical Education

An intensive study of medical education was made by a special committee out of concern for the facts that South Carolina has a low ratio of physicians to population and basic health deficiencies. The fundamental question addressed by the Committee is whether the state's medical education needs can be met at the Medical University or whether a second medical school is necessary at this time.

The conclusion arrived at by the Committee and concurred in by the Commission is that the state should set as a goal achieving the national median rate of 130 physicians per 100,000 people. This should be approached first by giving support for increasing the output of physicians by the Medical University and especially by encouragement of the development of regional health education centers. If within a reasonable time it appears that the state's needs cannot be met through educational activities at the Medical University the question of a second medical school should then be reconsidered.

Private Higher Education

It is a well-known fact that private institutions in this state (and elsewhere) are under financial strain and are in grave danger of losing their effectiveness and place in the overall system of higher education. It must be accepted that state government has a responsible role to carry out in supporting private colleges and thereby maintaining a valuable educational resource as well as reducing the costs to the taxpayer of higher education.

Elimination of the constitutional barrier to providing indirect aid to sectarian institutions has been recommended by the Commission on Higher Education. If this change is made then the tuition grants program may be strengthened, co-operation between public and private institutions can be increased and contractual means established to provide support to private colleges. In the interim every legal course should be followed to support this part of the higher education system.

Organization for Higher Education

If the state resources available for higher education are to be employed in the most effective manner an effective coordinating agency is required. The alternatives are unrestricted competition between institutions or a governing board to provide centralized direction of activities. Neither offers a desirable alternative to reasonable autonomy for colleges and universities to permit on-the-ground management of resources with coordination to eliminate needless duplication and self-serving competition.

To that end recommendations are made in Chapter XIII for improving the effectiveness of the Commission on Higher Education.

CHAPTER II

ENROLLMENTS AND ADMISSIONS

Introduction

Basic to any long-range planning for higher education is an examination of the student pool which is expected to seek educational opportunity beyond the high school. This chapter undertakes such an assessment of the estimated student demand for higher education in South Carolina through 1980.

Because the matter of estimated numbers of students enrolled is linked to the degree of accessibility of opportunity, admissions policies and practices are also examined. The estimated future enrollments are based in large measure on the assumption that the changes in admissions practices suggested will in fact take place.

Underlying all of the work on which this chapter is based, however, is the assumption that no major changes in the structure of higher education in the state will occur during the decade, and that no major upheavals will occur either on the national or local economic scene. Other assumptions made are stated in the appropriate sections.

Assumptions Governing Enrollment Projections

The relevant assumptions laid down by the Steering Committee for guidance in making enrollment estimates for the decade of the 70's included the following:

1. the state will continue to develop a three-tiered system of higher education including only the existing institutions;
2. no new state-supported senior colleges will be developed during the decade, no university branches will develop into senior institutions, nor will any additional nonpublic institutions become state-supported;
3. a program of state indirect aid to private colleges will be permissible

following constitutional amendments in 1972;

4. Winthrop College will be permitted to enroll males on a degree-credit basis; and
5. the system of public two-year education, including existing but no new university branches and Technical Education Centers, will continue to exist throughout the decade.

Methodology of Projections for Colleges and Universities

There are two principal methods which have gained acceptance in projecting state-wide college enrollments.⁽¹⁾ One method, sometimes called the "cohort survival" method, entails use of grade-succession factors relating the numbers entering college freshmen to the numbers of high school graduates within the state. Given projections of the number of high school graduates annually for future years, these factors can be used to estimate the size of the annual freshman class. Retention rates of college students from the freshman year through the senior year to graduate or professional school may then be used to estimate the total future college population, by year. This method is not applicable because:

1. estimates of the number of high school graduates through the decade were not available, and
2. reliable data on the detailed retention rates in college, on a state-wide basis, are not available.

A second method, usually referred to as the "Age-Group" or "Ratio" method, establishes from historical data a correlation between the total college population in the state and a given age group of the state's population. The correlation usually is established as a function of time. The correlation once determined is then projected into the future and applied to projections of the given age group population to obtain an estimate of the collegiate

enrollment. The age group usually employed in projections of this kind is the group 18 through 21 years old.

This method was selected in order to obtain estimated future total enrollments independent of those provided by each institution in its own "Statement of Goals".

The age-group method does not imply that all college students are expected to fall within the selected age span. To the extent that the distribution of the ages of those enrolled in college changes in the future as compared to the base period, and to the extent that the percentage of out-of-state students changes in the future as compared to the base period, projections made by this method may suffer in accuracy. However, none of the assumptions made above require any substantial shifts in the characteristics of the college population in South Carolina for the coming decade. The age-group method is thus believed to be as accurate as any other.

Projections of Enrollments for Colleges and Universities

The Age-Group Method

Projections of the population 18-21 years of age were made by the Division of Research and Statistical Services, State Budget and Control Board, by using a four-year moving total of the live births minus infant deaths lagged for the appropriate number of years. The total estimated population for 1960 derived by this method was adjusted to the actual 1960 Census count.

Projections were then made for each year through 1985 based on the following assumptions:

1. net out-migration of the 18-21 age group would slow down until by 1985 there would be a balance between gross migration in and gross migration out;
2. continued economic development and increasing educational opportunities will make it possible for the first assumption to materialize; and

3. no significant decline will occur in the number of young people in military training.

The test of this methodology in accordance with the 1970 Census showed that the actual count of 217,738 young persons was only 1,100 above the projection. The projections from 1961 until 1980 were corrected for this difference. The results are shown in Figure 1, p. 47, and in Column 2 of Table I, p. 50

Actual data on headcount enrollment in the public and private colleges and universities were correlated with the 18-21 year old population figures from 1961 through 1970 and state totals were projected through 1980. The results are shown in Columns 3-6 of Table 1, and as the curves labeled "Age-Group" in Figure 2, p. 48.

Institutional Goals

Each college and university was asked to supply, in its "Statement of Goals", its own projection of its enrollment pattern from 1970 through 1980.

The results for the public institutions are given in Table II and as the suitably labeled curves in Figure 2.

Not all nonpublic institutions were able to respond to a request for enrollment projections through the decade. The data for those responding is condensed in Table III-A, p. 52. The 12 senior institutions reporting enrolled, in fall 1970, 63.2% of the total students in senior colleges; and the three junior colleges, 56.7% of the students in this sector. The yearly totals from Table III-A were adjusted by these factors, yielding the totals for the nonpublic sector shown in Table III-B, p. 53, and as the dotted curve for this sector in Figure 2. The explicit assumption made in this procedure is that the non-responding institutions in the nonpublic sector would exhibit the same growth pattern as those which responded to the request for enrollment projections.

Modified Age-Group Method

Inspection of Figure 2, or of the data in Tables I, II (p. 51), and III-B,

shows that the differences in projections between the independent Age-Group Method and the sums of the projections by all individual institutions are minor to about 1974; and, for the nonpublic colleges, are within the uncertainty to be expected for either method throughout the decade.

The Commission therefore adopts, for planning purposes, the projection given in Table IV, p. 54, and shown as the curve, labeled Modified Age-Group Method, in Figure 2. This modified projection is based on the assumption that:

1. enrollments in the nonpublic sector will increase for the coming decade as indicated by the Age-Group method (Table I), and
2. enrollments in the public sector will increase essentially as projected by the institutions up to 1974, but that from 1974 through 1980, further increases in the public sector will follow the growth rate dictated by the Age-Group Method.

Comparisons with United States Office of Education⁽²⁾ figures for the nation as a whole indicate that South Carolina will continue to lag behind the nation as measured by the proportion of its young people enrolled in college.

Comparison Between the United States and South Carolina

Year	Ratio of Degree-Credit Enrollment of 18-21 Age Group (1)	
	United States	South Carolina
1960	0.37	0.20
1965	0.45	0.22
1970	0.53	0.27
1975	0.60	0.33
1979	0.65	0.37

(1) Including "degree-credit undergraduate, graduate, and first professional but excluding vocational/occupational such as TEC's.

Comparisons of this kind, however, may not be strictly accurate. The problem arises because the data are those reported by individual institutions, and,

at least from state to state, there is apparently some ambiguity about what constitutes "degree-credit" enrollment. This problem is most pronounced at the community junior college level. National figures compiled by the USOE exclude from degree-credit tabulations all enrollments in those institutions which bear such titles as "Technical Institute" or "Technical Center", as is the practice in South Carolina. In many states, however, vocational curricula leading to the associate (two-year) degree are offered in community junior colleges. In at least some of these states (e.g., New York) such enrollments are included in institutional and state totals as degree-credit enrollments. The effect of this practice is to inflate, however slightly, the national ratios in the Table above as compared to that recorded for South Carolina. It should be obvious that this effect is relatively minor, however.

Most southeastern states apparently employ the same definitions, for reporting purposes to USOE, as does South Carolina. This should allow valid comparisons with near neighbors. For 1969, the ratio of degree-credit college enrollment to population 18 through 21 years of age for some of the southeastern states was as given below:

State	Ratio in %, Degree-Credit College Enrollment to College-Age Population
Maryland	49.9
Florida	45.8
Tennessee	44.1
Louisiana	42.5
Kentucky	40.6
Alabama	37.5
Mississippi	36.0
North Carolina	34.4
Virginia	34.0

State	Ratio in %, Degree-Credit College Enrollment to College-Age Population
Georgia	32.8
South Carolina	25.6

It is clear that South Carolina lags behind even her near neighbors in the percentage of young people enrolled in college.

Actual and projected relative growth rates for all college enrollment in the nation and in South Carolina are compared in Figure 3, p. 49. For the 1960 decade, the South Carolina college enrollment growth rate paralleled that in the rest of the states. For this period the population aged 18-21 grew by 49% nationally, and by 38% in South Carolina.

For the period from 1970-75, according to the South Carolina Modified Age-Group projection, it is estimated that this parallel growth will continue. During this time span, the national population aged 18-21 will increase by 13% and the South Carolina population by 9%.

From 1975 to 1979, however, the South Carolina population will decrease by 5%, whereas the United States population will increase by 4%. It is this diversity that results in the divergence of the two curves of Figure 3 after about 1975.

It should be noted that attempts to reach United States averages, in terms of percentages of young people enrolled in college during the coming decade, while highly desirable from a number of standpoints, appear to be unrealistic. This is particularly true in light of the assumptions, none of which would substantially alter the current system of higher education in the state, under which these estimates were made. For example, setting a goal of reaching the national average in the population ratio by 1979 would require that South Carolina colleges enroll by that year 147,000 students, or increase present-day enrollments by nearly 2.5 times over the decade.

Projections by Institution

An analysis similar to that carried out for the state as a whole could have been conducted for each of the public institutions. However, two of the eight public institutions are new in 1970, three of the remainder serve various specialized groups--even if Winthrop becomes coeducational it is thought that most male students would be commuting students--and one is a professional school only. Under these conditions, it is believed that the most accurate method of estimating how the students enrolled in the public sector may distribute themselves in the various institutions is to use as a basis the institutional projections themselves.

Accordingly, the public institutional projections (Table II) were, for each year, adjusted downwards so that the sum agreed with that predicted by the Modified Age-Group Method (Table IV, p. 54); and, for each year, each institution's share of the new adjusted total was assumed to be the same as originally estimated by the institution (Table II). The results of this exercise, by institution, are given in Table V, p. 55.

However, it is recommended that enrollment maxima be established at both Clemson University and the University of South Carolina. Specifically, it is recommended that Clemson University limit total main-campus headcount enrollment to no more than 10,000 and the University of South Carolina limit total main-campus headcount enrollment to no more than 18,000 by limiting freshmen enrollment to 2500; and that both institutions maintain these limits by more rigorous admissions criteria at the undergraduate level, as recommended below.

Projections for the Technical Education Centers

Historical data for fall full-time, and for full-time equivalent, students at the state's Technical Education Centers are shown in Table VI. In this case,

total headcount enrollments are not given because the historical data available do not distinguish between students enrolled in degree (or certificate) programs and those enrolled for shorter-term or special skills courses. It should also be noted that the "full-time equivalent" definition currently employed by the TEC system is not exactly comparable to that used in the public college system in the state, in that the TEC system is based on annual (rather than semester) contact (rather than credit) hours.

Also shown in Table VI are fall full-time, and full-time equivalent, enrollments as projected by the staff of the State Committee for Technical Education. Both these projections imply increases of 200% in the enrollments in the TEC's by 1980.

The age-group method for forecasting enrollments in the Technical Education Centers may be less accurate than has proven to be the case for college and university enrollments simply because TEC's vocational and occupational programs are properly designed to attract a wider pool of students. Offsetting this factor, which would underestimate future enrollments, is the fact that 10 of the 13 Technical Education Centers opened their doors in the period covered by the historical data in Table VI, p. 56. This rapid increase in the number of Centers available could lead to overestimates of future enrollments since only three more TEC's (the former Regional or Area Trade Schools) are projected to complete the system through 1980.

Inspection of the historical data contained in Table VI shows that possibly because of the offsetting factors described above, both fall full-time and full-time equivalent enrollments show a strong correlation with the state population 18-21 years old. A linear fit to the historical data for fall full-time enrollment has a positive slope of $0.254\% \text{ yr.}^{-1}$, and a linear fit for the full-time equivalent data a positive slope of $1.04\% \text{ yr.}^{-1}$, both in relation to the state

population 18-21 years old. Extrapolating to 1980 on the basis of these linear fits to the historical data yields the projection shown in Table VII, which are believed to be the best estimates now available.

Inspection of the projected enrollments, made by TEC staff in Table VI, shows that those also indicate a linear rate of growth in the proportion of the age group enrolled, but at rates ($0.59\% \text{ yr.}^{-1}$ for fall full-time and $2.03\% \text{ yr.}^{-1}$ for full-time equivalent) which are roughly twice those derived from the historical data. The result is that whereas the projection given in Table VI would estimate the fall full-time enrollment at 18,350 by 1978, linear extrapolation method would place the corresponding number at 11,600, less than 60% of the former estimate. Because there is no evident reason why enrollments at the centers should increase much more rapidly in the immediate future than they have in the recent past, the linear extrapolation model is believed to be more nearly accurate.

Admissions Policies

Current Practices

No college or university in the state currently uses any one fixed criterion for admissions purposes in the sense that any applicant not meeting that one criterion is automatically rejected. Instead, most colleges and universities--and all public ones--employ a combination of two or more criteria in making admissions decisions on the applicant pool.

The two most common criteria in use in the public sector are rank in high school class, and scores on the verbal and mathematical portions of College Entrance Examinations Board's Scholastic Aptitude Test (SAT). Although the specific criteria used within the public sector vary widely, especially the weights given to class rank and test scores in combination, it remains generally

true that high class rank can and often does compensate for low performance on standardized tests, and vice versa.

Precisely because the tests--such as the SAT--are standardized and are used in very much the same ways described above by most user colleges, in South Carolina and elsewhere, some useful information can be obtained by comparing large groups of students by means of these.

In the Table below are displayed scores obtained⁽³⁾ by all South Carolina high school seniors who took the SAT in 1969-70. This group represented slightly more than one-third of the estimated 35,000 seniors that year. The mean scores of this group of seniors are compared below to the mean scores made by all U.S. high school seniors who took the test that year.

Comparison of Mean Scores of High School Seniors on SAT,
South Carolina and United States, 1969-70

<u>Tests</u>	<u>Men</u>		<u>Women</u>	
	<u>S.C.</u>	<u>U.S.</u>	<u>S.C.</u>	<u>U.S.</u>
Verbal	389	458	378	464
Math	433	510	390	466

In every case, the mean scores obtained by South Carolina seniors are significantly less than the national means, the differences ranging from about 70 to just under 90 points. It should be remembered that both groups, South Carolina and United States, are self-selected in that the tests are voluntarily taken, presumably largely by those with aspirations for college.

When, however, similar comparisons are made for freshmen--those who have applied for, been accepted, and subsequently enrolled in, college--these differences are reduced. This can be seen from the Table below, which compares mean SAT scores for South Carolina college freshmen to those of all U.S. freshmen in all colleges.

Comparison of Mean Scores of College Freshmen,
South Carolina and United States, 1969-70

<u>Tests</u>	<u>Men</u>		<u>Women</u>	
	<u>S.C.</u>	<u>U.S.</u>	<u>S.C.</u>	<u>U.S.</u>
Verbal	441	440	438	467
Math	486	509	446	461

On the average, South Carolina residents in all South Carolina colleges again are slightly below United States norms, but the average difference is much less than for the high school seniors group, ranging in this case from a maximum of 29 points down to an insignificant difference.

Nonetheless, there is no evidence that South Carolina colleges and universities reject large numbers of applicants. Indeed, 83% of all state high school residents who applied for admission to South Carolina colleges were accepted for admission in 1970-71. In the public sector, the two senior universities accepted 77.2% of all South Carolina residents who applied, and the state colleges 91.2%. These high ratios of acceptances are not, moreover, highly dependent on the composite (Verbal plus Math) SAT scores obtained by the applicants. Such composite scores may take on values lying between a minimum of 400 and a maximum of 1600. Only in the lowest range, composite scores of 400 to 600, did the acceptance rate, there 45%, fall significantly below 80%.

Within the public sector alone there are only small differences in academic aptitude as measured by these standardized tests between students at the two senior universities, considered together, and at four state colleges (College of Charleston, Francis Marion, The Citadel and Winthrop). In this case, mean scores for men and women in Verbal and Mathematical tests averaged about 40 points higher for the universities than for the colleges.

And in the public sector, there were only small differences in the mean scores obtained by South Carolina freshmen as compared to enrolled freshmen from

out of state. Examination of the Table below shows that nonresident women exhibited a mean score about 20 points higher in both Verbal and Math tests, but nonresident men were only 10 points higher in the means than South Carolina men on the Verbal portion, and were about the same value lower in the Math portion.

Comparison of Mean SAT Scores, for 1970-71
Freshmen Enrolled at Public Institutions

Tests	Men		Women	
	S.C.	Out of State	S.C.	Out of State
Verbal	459	469	448	466
Math	542	534	457	479

For 1970-71, the number of out-of-state residents enrolled in public institutions (exclusive of the Medical University) was as given below:

Number (Headcount) of Nonresidents, Fall, 1970

	<u>No.</u>	<u>% of Total</u>
Clemson (Main)	1670	22
College of Charleston	146	18
Francis Marion	10	1
S. C. State	130	6
The Citadel	1280	48
U. S. C. (Main)	3390	25
Winthrop	430	11
Total	7056	22.3

Virtually all of the students enrolled (3490) at the universities' branches and centers are believed to be residents, and if these are added to the totals above, the systemwide nonresident share drops to 20.1%. Examination of data for prior years shows no pronounced trends in these ratios for the system.

The data above include all students, both undergraduate and post-baccalaureate.

The percentages given above are not inconsistent with similar data from neighboring states; and it is concluded that the fraction of nonresident students enrolling in South Carolina is not excessive.

Further, in no southeastern state is a systemwide, legally fixed "quota" system for the enrollment of nonresidents maintained. In Georgia, Florida, Tennessee and North Carolina, the state governing or coordinating agency has adopted guidelines suggesting a systemwide ratio for undergraduates, the figure cited most often being 15%; but this is applied only to undergraduate enrollments, and is generally not levied against each institution individually.

Recommendations as to Admissions Policies

The Commission fully respects the right, and the duty, of each institution to establish its own specific admissions criteria. The Commission also accepts the responsibility of assisting the public institutions in seeing to it that the specific criteria established by each are consistent with its own specific mission, and that, taken as a whole, the admissions policies meet real needs of all the citizens of the State. It is therefore recommended:

1. that the admissions criteria for the two senior universities, for main campus admissions to baccalaureate degree programs, be increased relative to those in the state colleges;
2. that the admissions criteria for the senior universities' branches and centers be reduced below present criteria and below those obtaining for the state colleges, so as to encourage a broader spectrum of abilities and aptitudes among applicants; it being presumed that in the interests of the students and of sound educational practice, corresponding remedial curricula not carrying baccalaureate-level credit will be made available to those students admitted only under such reduced criteria; and

3. that the admissions criteria for nonresidents at all public colleges and universities be increased relative to those obtaining for South Carolina residents, but that specific quota allocations, either for the system or for individual institutions, be avoided unless and until excessive non-resident enrollments are encountered.

Transfer Credit

At the present time, students in South Carolina's public college and universities may generally transfer credits fairly freely from one institution to another within the system, usually for those courses on which a "C" or better, or a grade-point ratio of 2.0 on a 4.0 scale, has been earned and also usually subject to the existence of a comparable course in the institution to which the credit is transferred.

It is recommended that a firm policy be adopted by all public institutions permitting any student to transfer credits, up to the maximum permitted by then existing accrediting association policy, between public institutions, provided only that the cumulative grade-point ratio of the transferred block of such credits be 2.0 or better on a 4.0 scale; and without reference to existence of similar courses in the institution to which the credit is transferred. This recommendation should not be taken to mean, for instance, that the specific course requirements for any given degree at any given institution need to be altered as a consequence of any such transfer of credits. A student transferring from institution "A", where he was a prospective major in mathematics, to institution "B", to major in accounting, could under this ruling bring with him non-comparable courses not all of which could fairly be charged off to electives; and should be required to complete the requisite course sequence in his new major. As a result, he may or may not accumulate more than the usual 120 semester hours required for graduation.

Further, it is recommended that credits earned toward the Associate in Applied Science degree from accredited Technical Education Centers be accepted for transfer to the public colleges and universities under the same conditions, regulations and procedures as from other accredited institutions of higher education. It is also recommended that public colleges and universities accept non-comparable college-level technical courses for transfer as electives.

College Credit Earned Outside the College Classroom

Given South Carolina's low rates of college attendance and of per capita income--factors which are related (see Chapter VII)--any sound and practical method which would reduce the time and expense required to complete a baccalaureate degree deserves the serious consideration of the higher education community.

The Carnegie Commission on Higher Education has recommended⁽⁴⁾ that consideration be given to the granting of college credit for advanced work completed during the high school years. An ongoing, nationally-recognized program is already in existence with similar objectives: the College Entrance Examination Board's Advanced Placement Program.

In 1970-71, 16 South Carolina colleges and universities had already signified a formal willingness to accept suitable scores on Advanced Placement courses for either advanced placement, collegiate course credit, or both. However, in 1969-70, only eight public high schools out of more than 200 in the state were offering one or more Advanced Placement courses (or examinations). It is recognized that not every high school in every locality may achieve the faculty capability or sufficient student interest to justify offering each year a complete spectrum of Advanced Placement curricula, which are avowedly taught at college freshman level. However, it would seem within reach during the decade to expect combinations of high schools to pool their resources so that such offerings should be available at least within each county in the state; and it is recommended that this be done.

At the same time, it is recommended that all public institutions of higher education formally subscribe to the Advanced Placement Program, allowing full credit for those courses with acceptable grades presented by all candidates.

Given demonstrably substandard performance on the Scholastic Aptitude Test on the part of South Carolina's college-bound high school seniors (p. 37), it seems unreasonable to expect college faculties to accept normal senior-level courses in lieu of freshman year of college work, now and without any change in the level or content of the secondary school curriculum.

However, in addition to the Advanced Placement mechanism recommended above, it is also recommended that:

1. each public institution adopt and publicize a policy of admitting students as regular freshmen who by the end of the eleventh grade have accumulated the requisite secondary units with appropriate grades and with appropriate standardized test (SAT) scores. This would only require that institutions eliminate the possession of a high school diploma from their formal admissions requirements. The intent is to provide a "speed-up" mechanism for those students sufficiently well motivated and prepared to take advantage of it. Virtually all institutions will follow this procedure now, but on a case-by-case basis, and the individual student must provide the initiative. It is also recommended that the high school confer a regular diploma at some point, e.g., after successful completion of 30 hours' college credit, as a matter of policy.
2. each public institution publicize and make more readily available regular freshman courses to twelfth-grade students on a "special-student" basis, regular credits earned as such to be credited to the student on admission, or available for transfer to any other accredited institution on an official transcript. Such courses could be offered either on the college campus or

within the high school. Geography limits such opportunities somewhat, and a problem of mutual time scheduling between the high school and college does exist.

The higher education community, nationwide, is coming to the recognition that many students, particularly those not going directly from high school to college, bring with them knowledge and experience which may make much of the traditional college curriculum redundant. Partly in response to this recognition, the College Level Examination Program has been initiated recently by the College Entrance Examination Board. Periodically throughout the year, at designated testing centers (none of which are yet located in South Carolina) examinations are given to candidates wishing to avail themselves of this service. A General Examination covers five broad areas included in the standard freshman and sophomore general education areas; and about 30 Special Examinations in specific subject matter areas are now available. A recent study⁽⁵⁾ indicates that this activity is gaining rapid acceptance among prospective students and among colleges alike. Participating institutions may grant up to two full years of college credit for successful candidates.

It is recommended that all public institutions offer full credit for candidates presenting acceptable grades on CLEP tests; and that all make available to applicants the CLEP battery.

It is not recommended that special departmental examinations, now generally available to any applicant in most public colleges as a mechanism at least for admission to advanced standing, be done away with entirely. However, it is suggested that the CLEP mechanism may be a more effective means to the same end.

Veterans of military service entering, or returning to, college in many cases have taken advantage of correspondence courses offered by the U.S. Armed Forces Institute (USAFI). It is recommended that all public institutions grant

full credit for those USAFI courses completed with satisfactory grades. It is also recommended that all public institutions grant credit for service experience where that may be shown to be equivalent to college courses.

College Day Programs

There are indications⁽³⁾, from both the collegiate and secondary school levels, that the program of College Day visits to high schools is in need of review.

The Commission adopts as an objective to undertake a review of this activity, with the aim of improving the free flow of information between all sectors of post-secondary education and the high schools, their students, principals and guidance people.

References

1. L. J. Lins, Methodology of Enrollment Projections for Colleges and Universities, American Association of Collegiate Registrars and Admissions Officers, Washington, D.C., 1960.
2. A Fact Book on Higher Education, First Issue, 1971; Enrollment Data, Tables 71.5 and 71.6, American Council on Education, Washington, D.C., 1971.
3. Annex A - Report of the Long Range Planning Committee on Enrollments and Admissions.
4. Less Time, More Options, Carnegie Commission on Higher Education, McGraw-Hill, New York, 1971, page 15.
5. R. I. Ferrin and W. W. Willingham, Practices of Southern Institutions in Recognizing College-Level Achievement, Higher Education Surveys, Report No. 3, College Entrance Examination Board, Princeton, New Jersey, December, 1970.

FIGURE 1
ACTUAL AND PROJECTED S.C. POPULATION 18-21 YEARS OLD, 1960-1980

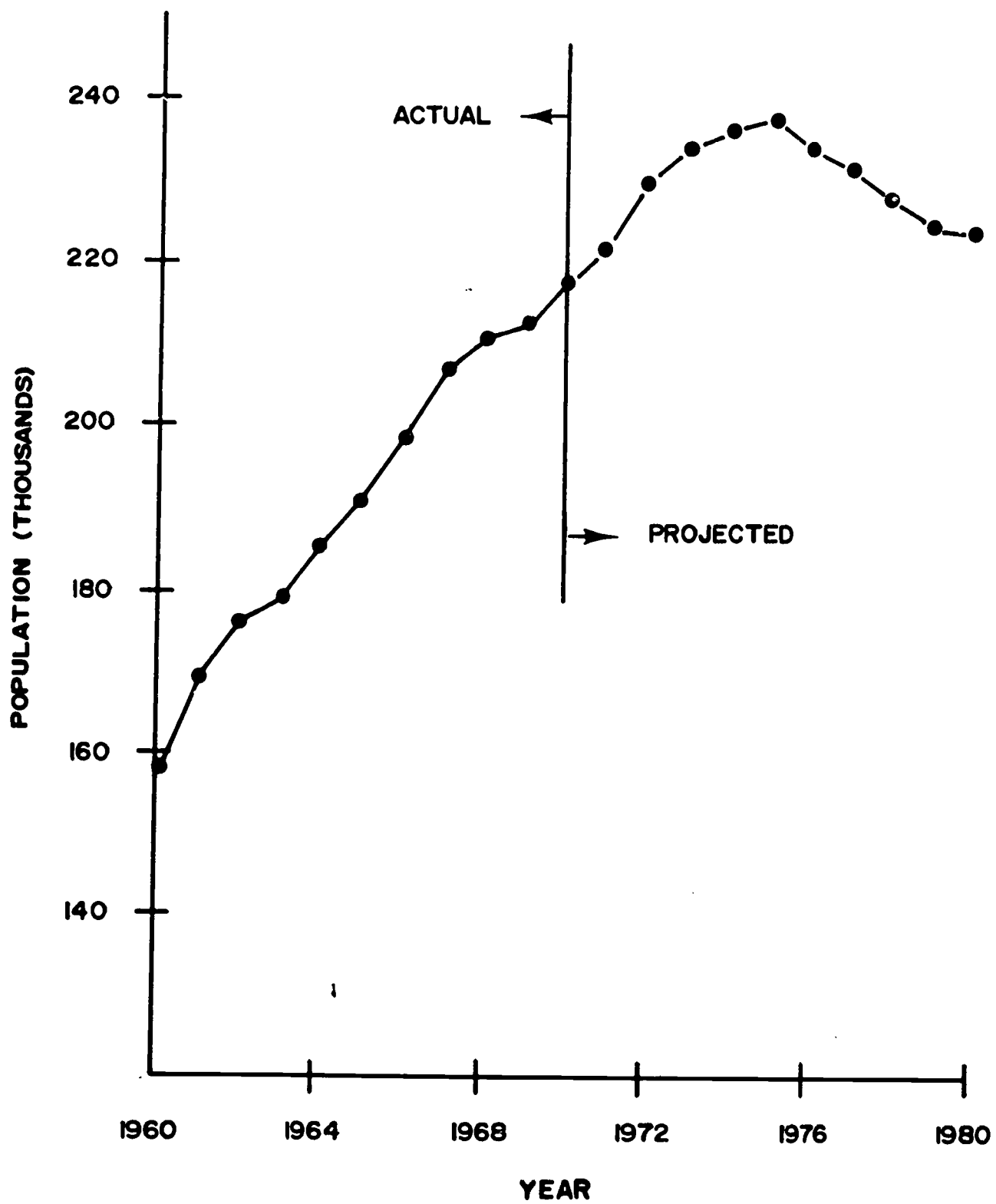


FIGURE 2

S.C. COLLEGE HEADCOUNT ENROLLMENTS ACTUAL AND PROJECTED TOTAL, 1960 - 1980

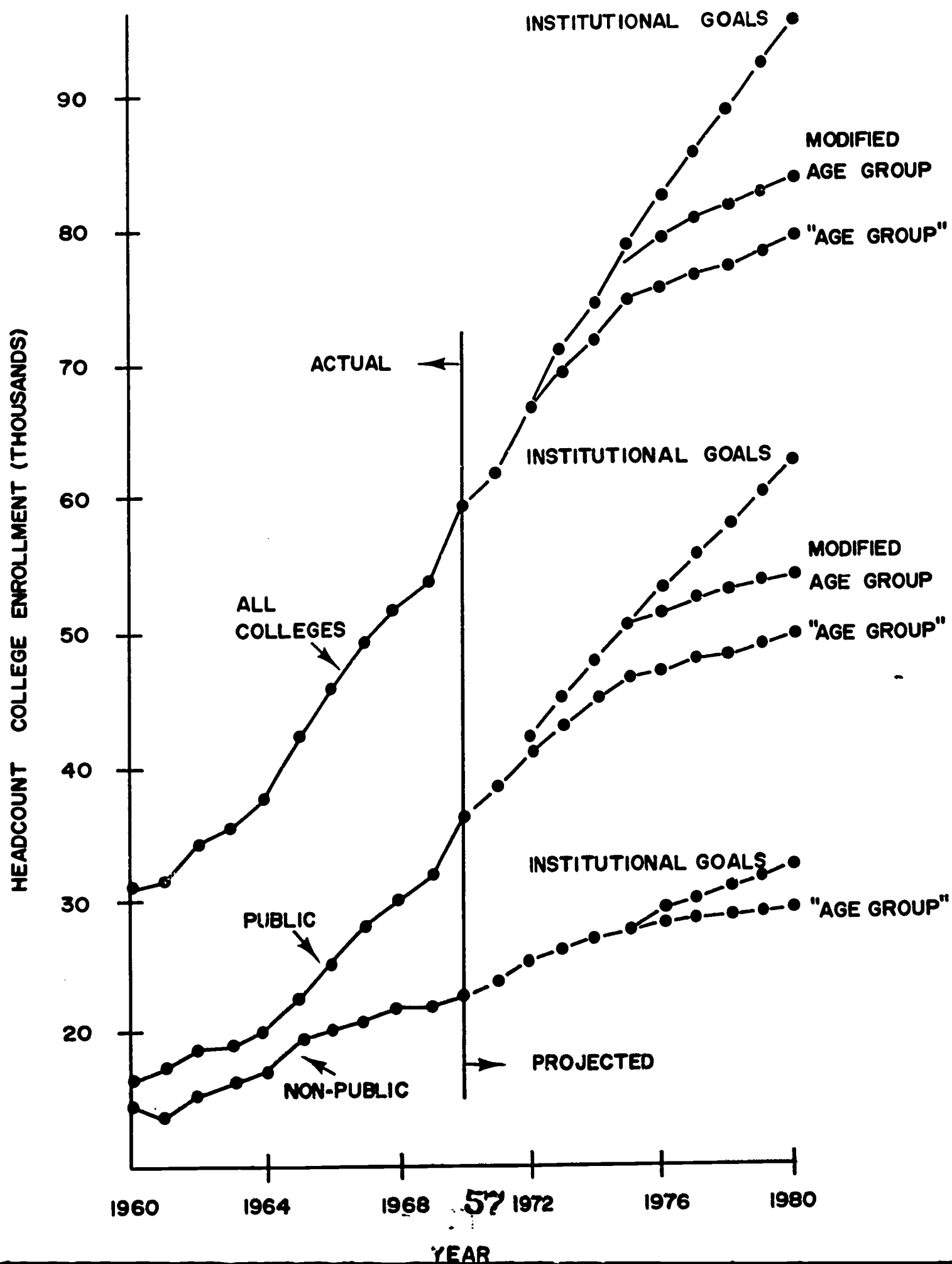


FIGURE 3

RELATIVE GROWTH INDEXES DEGREE - CREDIT ENROLLMENT, 1960 -1980

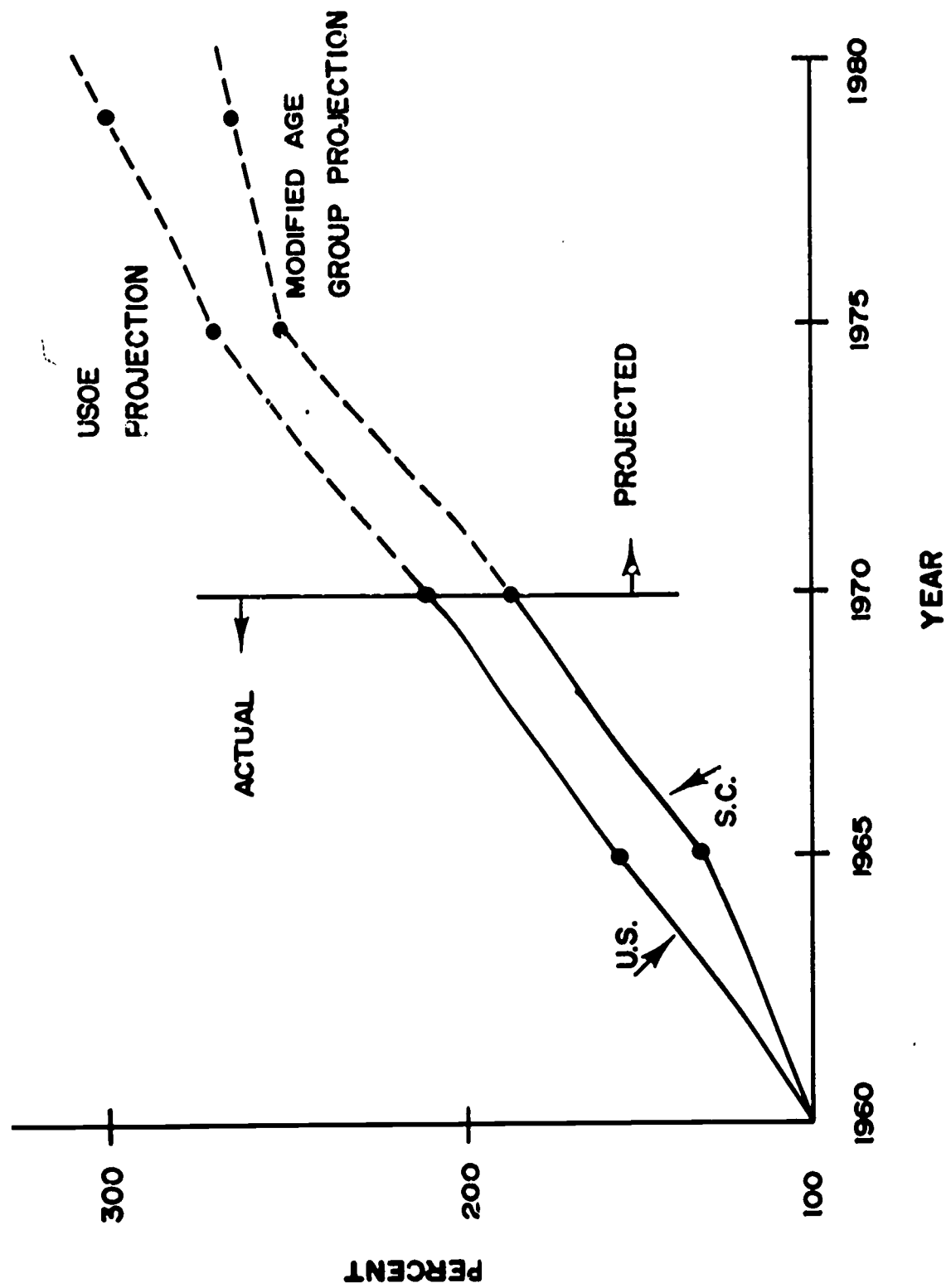


TABLE I
AGE-GROUP METHOD
PROJECTIONS OF TOTAL COLLEGE ENROLLMENT
(HEADCOUNT)
IN SOUTH CAROLINA COLLEGES AND UNIVERSITIES

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	POPULA- TION (18-21)	TOTAL COLLEGE ENROLLMENT	RATIO TOTAL COLLEGE ENROLLMENT TO POPU- LATION (18-21)	TOTAL COLLEGE ENROLLMENT IN PUBLIC COLLEGES	PUBLIC COLLEGE ENROLLMENT AS % OF TOTAL COLLEGE ENROLLMENT
1960	158,060	30,989	.1961	16,518	53.30
1961	168,717	31,692	.1878	17,640	55.66
1962	175,762	34,642	.1971	18,936	54.66
1963	179,186	35,749	.1995	19,179	53.65
1964	185,081	37,957	.2051	20,392	53.72
1965	191,191	42,449	.2220	22,850	53.83
1966	197,741	46,143	.2334	25,579	55.43
1967	206,988	49,674	.2400	28,325	57.02
1968	210,557	52,191	.2479	30,148	57.76
1969	212,285	54,286	.2557	31,934	58.83
1970	217,738	59,678	.2741	36,493	61.15
1971	222,074	62,737	.2825	38,557	61.46
1972	230,329	66,953	.2907	41,402	61.84
1973	233,816	69,880	.2989	43,378	62.07
1974	236,066	72,484	.3070	45,135	62.27
1975	237,786	74,958	.3152	46,804	62.44
1976	234,206	75,746	.3234	47,336	62.49
1977	231,627	76,831	.3317	48,069	62.56
1978	228,236	77,573	.3399	48,569	62.61
1979	225,504	78,490	.3481	49,188	62.67
1980	223,818	79,735	.3562	50,029	62.74

TABLE II

INDIVIDUAL PROJECTIONS BY INSTITUTIONS, TOTAL HEADCOUNT ENROLLMENTS

YEAR	PUBLIC INSTITUTIONS					The Citadel	MUSC	Winthr. Total Pub.		NON-PUBLIC INSTS. (2)		TOTAL
	Clem (1) (Main)	USC (Main)	USC (Branches)	USC Charl Total	F.Mar.	SC State						
1970 (3)	7601	13558	3486	17044	802	2148	2668	994	3910	36496	23185	59681
1971	8060	14250	3290	17540	1090	2300	2560	1190	4549	38640	23970	62610
1972	8400	15400	3660	19060	1430	2400	2760	1370	5000	42200	24980	67180
1973	8750	16350	3930	20280	1750	2510	2960	1640	5420	45300	26130	71730
1974	9090	17050	4280	21330	2040	2620	3140	1720	5780	48030	26570	74600
1975	9560	17650	4570	22220	2510	2730	3300	1900	6140	50760	28240	79000
1976	9830	18300	4940	23240	2960	2840	3400	2060	6380	53390	29280	82670
1977	10200	18900	5280	24180	3410	2890	3500	2240	6620	55850	30150	86000
1978	10580	19300	5720	25020	3880	2930	3550	2410	6880	58170	31120	89270
1979	10950	19800	6130	25930	4430	2990	3550	2590	7120	60570	32010	92580
1980	11320	20000	6530	26530	5010	3100	3550	2780	7380	62700	32660	95360

(1) Clemson's Goals Report did not project enrollment patterns at its Centers.

(2) For all 27 colleges, based on estimates provided by 15 today enrolling about 60% of all in this sector.

(3) Actual opening Fall 1970 headcount.

-Data excerpted from individual "Statement of Goals"

TABLE III-A
ENROLLMENT PROJECTIONS, TOTAL HEADCOUNT, (1) NON-PUBLIC COLLEGES

YEAR	INSTITUTIONS										JUNIOR COLLEGES						
	Baptist	Benedict	Coker	Cola.	Converse	Frankline	Furman	Limestone	Newberry	P. C.	Voorhees	Wofford	Totals	Anderson	No. Colls.	Sptbs.	Total
1970	1,839	1,410	398	894	732	750	2,190	630	805	782	612	989	11,940	745	537	886	2,186
1971	(1,896)	1,500	(435)	920	(760)	800	2,290	680	825	819	700	(1,010)	12,640	781	570	(900)	2,250
1972	(1,950)	1,600	(470)	950	(780)	850	2,390	700	850	833	800	(1,030)	13,200	817	595	(910)	2,320
1973	(2,010)	1,800	(505)	980	(800)	890	2,490	750	875	854	850	(1,050)	13,850	853	620	(920)	2,390
1974	(2,060)	2,000	(540)	1,010	(825)	925	2,590	785	900	880	950	(1,070)	14,050	889	645	(930)	2,460
1975	(2,120)	2,100	(575)	1,040	(850)	950	2,680	820	925	912	1,000	(1,090)	15,000	925	690	(940)	2,560
1976	(2,180)	2,200	(610)	1,070	(880)	985	2,730	850	950	940	1,050	(1,110)	15,560	971	715	(950)	2,640
1977	(2,230)	2,300	(645)	1,100	(910)	1,020	2,780	900	975	967	1,100	(1,130)	16,060	997	735	(960)	2,690
1978	(2,340)	2,400	(690)	1,130	(940)	1,065	2,830	940	1,000	997	1,100	(1,150)	16,580	1,033	770	(970)	2,770
1979	(2,370)	2,500	(725)	1,160	(970)	1,102	2,870	970	1,000	1,026	1,125	(1,170)	17,000	1,069	850	(980)	2,900
1980	2,400	2,500	750	1,200	1,000	1,150	2,930	1,000	1,000	1,058	1,125	1,200 ²	17,300	1,105	(900)	(1,000) ³	3,000

Notes: 1) Figures in Parentheses are linear interpolations between "Bench-Marks"

2) Limestone Figures in FTE

3) Maximum projection

TABLE III-B

ESTIMATED PROJECTIONS, TOTAL HEADCOUNT, NONPUBLIC COLLEGES⁽¹⁾

<u>YEAR</u>	<u>NonPub.Sr.</u>	<u>NonPub.Jr.</u>	<u>Tot., NonPub.</u>
1970	18,890	3,860	22,750
1971	20,000	3,970	23,970
1972	20,890	4,090	24,980
1973	21,910	4,220	26,130
1974	22,230	4,340	26,570
1975	23,730	4,510	28,240
1976	24,620	4,660	29,280
1977	25,410	4,740	30,150
1978	26,230	4,890	31,120
1979	26,900	5,110	32,010
1980	27,370	5,290	32,660

(1) From individual institutional projections.

TABLE IV
ESTIMATED HEADCOUNT ENROLLMENTS, MODIFIED AGE-GROUP METHOD

Year	S.C. Population 18 - 21 (Thousands)	Estimated Total Headcount, Enrollments				
		All Colleges (Thousands)	Ratio Enroll/Pop (%)	Public Colleges (Thousands)	Public, % Of Total	Private Colleges (Thousands) Private, % Of Total
1970	217.7	59.7	27.4	36.5	61.1	23.2 38.9
1971	222.1	62.6	28.2	38.5	61.5	24.1 38.5
1972	230.3	67.2	29.2	41.6	61.9	25.6 38.1
1973	233.8	71.4	30.5	44.9	62.9	26.5 37.1
1974	236.1	74.6	31.6	47.2	63.3	27.4 36.7
1975	237.8	79.0	33.2	50.8	64.3	28.2 35.7
1976	234.2	79.8	34.1	51.4	64.4	28.4 35.6
1977	231.6	81.0	35.0	52.3	64.6	28.7 35.4
1978	228.2	81.8	35.8	52.8	64.5	29.0 35.5
1979	225.5	82.7	36.7	53.4	64.6	29.3 35.4
1980	223.8	84.0	37.5	54.3	64.6	29.7 35.4

TABLE V

MODIFIED AGE-GROUP METHOD

ESTIMATED HEADCOUNT ENROLLMENTS (Thousands)

PUBLIC COLLEGES

Year	Total (Table IV)	Clemson Main	Clemson Br.	Clemson Total	USC Main	USC Br.	USC Total	Charl.	F. Mar.	S.C. State	The Citadel	MUSC	Winthrop
1970	36.5	7.6	0.4	8.0	13.6	3.5	17.0	0.8	0.9	2.1	2.7	1.0	3.9
1971	38.5	7.9	0.4	8.3	14.0	3.2	17.2	1.1	1.3	2.3	2.5	1.2	4.5
1972	41.6	8.2	0.5	8.7	15.0	3.6	18.6	1.4	1.7	2.3	2.7	1.3	4.9
1973	44.9	8.6	0.5	9.1	16.0	3.8	19.8	1.7	2.1	2.5	2.9	1.6	5.3
1974	47.2	8.8	0.5	9.3	16.6	4.2	20.8	2.0	2.2	2.6	3.1	1.7	5.6
1975	50.8	9.5	0.5	10.0	17.5	4.5	22.0	2.5	2.5	2.7	3.3	1.9	6.1
1976	51.4	9.4	0.5	9.9	17.4	4.7	22.1	2.8	2.5	2.7	3.2	2.0	6.1
1977	52.3	9.5	0.5	10.0	17.5	4.9	22.4	3.2	2.6	2.7	3.2	2.1	6.1
1978	52.8	9.5	0.5	10.0	17.3	5.1	22.4	3.5	2.6	2.6	3.2	2.2	6.2
1979	53.4	9.6	0.5	10.1	17.3	5.4	22.7	3.9	2.6	2.6	3.1	2.3	6.2
1980	54.3	9.7	0.5	10.2	17.2	5.6	22.8	4.3	2.7	2.6	3.0	2.4	6.3

TABLE VI

ACTUAL AND PROJECTED (BY STATE COMMITTEE STAFF) TEC ENROLLMENTS

Year	Fall Full Time Enrollment	Ratio, Fall Full Time Enrollment to Population (%)	Full Time Equivalent Enrollment	Ratio, FTE Enrollment to Population (%)
1964	1180	0.64	4100	2.21
1965	2160	1.13	7480	3.91
1966	3100	1.57	9640	4.88
1967	3330	1.61	12700	6.13
1968	3660	1.74	15020	7.14
1969	5120	2.41	16660	7.85
1970	6230	2.86		
			21810	10.02
1971	7550	3.40	26420	11.90
1972	9050	3.93	31680	13.75
1973	10500	4.49	36750	15.72
1974	11950	5.06	41820	17.72
1975	13350	5.61	46720	19.65
1976	14600	6.23	51100	21.82
1977	15850	6.84	55480	23.95
1978	17100	7.49	59850	26.22
1979	18350	8.14	63880	28.33

Actual

Projected

TABLE VII
PROJECTED ENROLLMENTS, TECHNICAL EDUCATION CENTERS

Year	Ratio, Fall Full Time Enrollment to 18-21 Population (%)	Fall Full Time Enrollment (Thousands)	Ratio, FTE Enrollment to 18-21 Population (%)	FTE Enrollment (Thousands)
1970	2.86	6.2	9.00	19.6
1971	3.12	6.9	10.04	22.3
1972	3.37	7.8	11.08	25.5
1973	3.62	8.5	12.12	28.3
1974	3.88	9.2	13.16	31.1
1975	4.13	9.8	14.20	33.8
1976	4.39	10.3	15.24	35.7
1977	4.64	10.7	16.28	37.7
1978	4.90	11.2	17.32	39.5
1979	5.15	11.6	18.36	41.4
1980	5.40	12.2	19.40	43.4

CHAPTER III
ACADEMIC PROGRAMS

Introduction

Public institutions in the state offer a diversified list of academic programs ranging from the two-year associate degree through the doctorate. Traditionally, the planning and implementation of these academic programs has suffered, from a state or national point of view, because each college and university has developed its own academic programs on an individual, sometimes competitive basis. Each institution has interpreted the obligations placed upon it by charter and statute independently. There is little evidence pointing to solid inter-institutional cooperation on a voluntary basis to meet state, regional or national needs.

Because higher education is expensive--not only in terms of physical resources including dollars but also in terms of human resources--the state can no longer afford the luxury of an uncoordinated development of academic programs.

Program development in the state's colleges and universities for the decade of the 70's should be guided by the following objectives:

1. to maintain, develop and implement programs of high and sustained quality in sufficient diversity so as to meet reasonable needs of students, the state and the nation;
2. to make post-secondary education available to all South Carolinians who are able to participate, and desire the opportunity; and
3. to maintain diversity and autonomy, subject to state-level coordination, of the state's institutions of higher education.

This chapter is devoted to an examination of existing academic programs and of those proposed for the coming decade. Observations and recommendations which are necessary to meet the objectives outlined above, given limited resources, are made.

Institutional Objectives for the Decade

Planning for academic programs that will meet the objectives set forth above, not only in quantity but perhaps more importantly in quality, must start with an assessment of existing programs. A list of the academic programs by specialty area now offered by the eight public colleges and universities is included in Annex B--Report of the Long-Range Planning Committee on Academic Programs.

Examination of this list shows that all eight of the institutions combined offer 214 baccalaureate-degree programs in 113 specialties. Six of the eight institutions (excluding the College of Charleston and Francis Marion College, neither of which yet offer any post-baccalaureate work) offer a total of 138 master's degree programs in 107 specialty areas, excluding first professional degrees in law, medicine and dentistry. At the doctoral level, the three universities provide 62 different programs in 57 separately-listed program areas.

This rich variety of existing offerings, the vast majority of which were in place prior to establishment of the Commission in 1967, illustrates the largely haphazard and uncoordinated--not to say competitive--way in which program offerings have grown throughout the state.

These new degree programs which each institution included in its own "Statement of Goals", and which each plans to submit individually for Commission review during the decade, are listed below.

New Bachelor's Degree Programs Proposed By The
Public Institutions, 1970-1980

Clemson University

Biology, earth science, recreation and parks, park management, therapeutic recreation, water resources, forestry harvesting, forestry protection, forestry economics, marketing and sales, physical education, health education, hospital and health services, philosophy, distributive education, geography.

College of Charleston

Urban studies, fine arts, geology.

Francis Marion College

Art, political science, German, sociology, physics, philosophy, music, medical technology.

South Carolina State College

Economics, political science, speech and drama, German, art, music, physics.

The Citadel

Psychology, computer science.

University of South Carolina

Guidance and counselling, special education, health education, radio, television, public relations, photojournalism and cinematography.

Winthrop College

Environmental science, music, physics, anthropology, geography, journalism, regional development.

New Master's (And First Professional) Programs Proposed
By the Public Institutions, 1970-1980

Clemson University

Systems engineering, geology, agricultural mechanization, landscape architecture, ocean engineering, recreation and park administration, nutritional science, educational media, elementary education, community health nursing, clinical nursing, foreign languages, fisheries biology, architectural history, interior design, food science, special education, sociology, marine biology, physical education, extraterrestrial engineering, marketing analysis.

College of Charleston (With Charleston Consortium)

Business administration, marine science, elementary education, urban affairs, fine arts, history, social welfare, library science.

Medical University of South Carolina

Oral pathology, oral surgery, pharmaceutical science, public health, psychiatric nursing, public health nursing, medical-surgical nursing, maternal and child nursing.

South Carolina State College

Speech pathology, audiology.

University of South Carolina

Curriculum and instruction, adult education, early childhood education, history, journalism, music, college teaching, library science, psychiatric nursing, nursing administration, medical-surgical nursing, hospital pharmacy, pharmacy administration, urban planning, regional planning, studio art, creative writing, theater, computer science, statistics, international business and trade, environmental psychology, archeology and anthropology, marine biology, developmental biology, environmental biology.

Winthrop College

School psychology, reading, art, biology, business administration, sociology, chemistry, political science, public administration, economics, physical education, public school administration.

The Citadel

Special education, elementary education, guidance and counselling, business administration, marine science (with Charleston Consortium).

New "Master's Plus 30" Certificate Programs
Proposed by the Public Institutions, 1970-1980

Clemson University

Reading.

University of South Carolina

Elementary education, secondary education, curriculum and instruction, measurement, reading, exceptional children, speech pathology and audiology.

Winthrop College

Elementary education, secondary education and secondary education in English and in history, special education and counsellor education.

New Doctoral Programs Proposed
by the Public Institutions, 1970-1980

Clemson University

Systems engineering, textile and polymer science, biochemistry, microbiology, economics, guidance, reading, secondary education, forest resource management, wood science, forest environmental management, botany.

Medical University

Pharmaceutical science.

University of South Carolina

Educational psychology, educational foundations, student personnel services, curriculum and instruction, early childhood education, rehabilitation, counsellor training, physical education, college student personnel services, higher education, foreign languages, marine biology, developmental biology, environmental biology, environmental psychology, geography, sociology, social work, art, computer science, philosophy, journalism, archaeology and anthropology, pharmacy.

Winthrop College

Home economics.

If all these were approved, they would add a total of 53 new baccalaureate programs, 83 new master's degree programs and 37 new doctoral programs. This large number of new proposed programs, including some duplication of existing and other proposed programs, illustrates vividly the need for statewide planning for academic program development, and for painstaking Commission review prior to approval of each new proposed program.

Since early 1968, the Commission has had an established policy statement and a set of procedures whereby institutions may submit proposals for the initiation of new degree and other programs, as required by the enabling legislation. Experience with this policy and these procedures has provided abundant evidence that continued coordination at the state level is essential if the state's system of higher education is to meet real, not imagined, needs, in a rational manner, without unnecessary duplication, and at a reasonable cost.

Experience has also shown, however, that the existing procedures are not always strictly followed. Most institutions have freely taken advantage

of the procedures' explicit exhortation that consultation with the Commission staff in the early planning stages of new programs can be beneficial to all concerned--not only in helping to clarify the details of each proposal but also in serving as an "early warning" device in case another institution happens to be planning a similar program. Some other institutions, on the other hand, do not take advantage of this step in the recommended procedure. As a result some lost motion does occur, both at the institutional and Commission staff levels.

The Commission is most concerned, in carrying out this portion of its responsibilities, that proposed programs meet a real need in the region, state or nation; that this is done without unnecessary duplication--recognizing that some duplication even at the graduate level may be necessary--and that the full costs of each proposed program have been assessed and are reasonable.

The Commission must continue to act in approving, or disapproving, new program proposals submitted by the institutions. Further, the Commission recommends that the statutory authority creating the Commission be amended to authorize the Commission to withdraw approval of existing programs which are shown to be unnecessarily duplicative, insufficiently productive, or no longer required. Although it is believed that the authority to withdraw program approval is already present by inference in the Commission's enabling statute, an explicit statement to this effect would serve to remove any doubt which may exist.

In the meantime, the Commission adopts as an objective such a careful and painstaking review of existing programs, consonant with its existing responsibilities. Given favorable acceptance of the requested authority to

recommend withdrawal of approval for existing programs, the Commission would, with the advice of the State Council of Academic Deans, establish procedures for this activity. These procedures should provide for adequate notice to and consultation with the affected institution that such a recommendation for a specific program is being considered; and for a specific statement as to the perceived shortcomings of any such program.

It is obvious that effective program review, approval and planning is possible only after general agreement is reached as to the mission of each institution. No one institution, in this state or elsewhere, can hope to be all things to all men, or to provide all of the programs, services and functions demanded by its many constituencies.

Missions of the Institutions

It is therefore proposed that the following missions guide both the institutions and the Commission in their consideration of new academic program needs for the decade ahead.

The Universities

Only Clemson University, the Medical University of South Carolina and the University of South Carolina shall be authorized to begin new doctoral programs. Both the institutions and the Commission must exercise care and restraint in the initiation of new doctoral-level programs, particularly in the assessment of justifiable needs for such programs, taking special care to avoid not only the appearance but the fact of program duplication. Rare exceptions to the last may be permitted in cases of extreme need. In particular, joint efforts of two or more institutions in meeting new program needs must be encouraged.

The two senior institutions, Clemson University and the University of South Carolina, should each focus primarily, at all degree levels, on improving the quality of their existing programs, especially at the post-baccalaureate level. Elsewhere in this report (Chapter II) it is recommended that both stiffen entrance requirements to a significant degree. This would help to insure that instruction at the undergraduate level could be carried out at a more sophisticated level, and that the primary focus of both institutions could move from any emphasis on numbers of students served to the proper emphasis reserved to the university: to its graduate, research, and public service functions.

This is not to say that either institution should abandon undergraduate programs entirely, even at the lower division (freshman and sophomore classes) of the undergraduate colleges within the universities. On the contrary, the universities should be expected to take the lead in developing, testing, and demonstrating innovative practices in undergraduate education which should be applicable to other units in the state system which exist primarily to serve the undergraduate population.

Clemson University, as the land-grant university of the state, should continue to build on its established strengths in the technically-oriented areas. Its graduate and professional programs should continue to emphasize this orientation, especially in engineering (and the physical and mathematical sciences as required to undergird this effort), in textile sciences, in architecture and in the agricultural sciences (and the biological sciences as required to undergird this effort). A proliferation of graduate programs in the social sciences, the humanities, and education should not be offered except as required to meet specific state or local needs.

The University of South Carolina should take the lead in graduate and professional programs in the arts and sciences, in business, law and education. Included in the arts and sciences would be the social sciences, the humanities and foreign languages, and the physical, biological, and mathematical basic sciences.

It can be presumed that either university's undergraduate programs should be sufficiently complete and well rounded; with natural emphasis stemming from its special areas of graduate education and research, and public service.

The Medical University should retain its focus sharply on the healing arts, as a health-related institution. Programs for the training of physicians and dentists must remain central to this institution's mission: those for training nurses and established and emerging specialties in the allied health professions should be emphasized.

The State Colleges

The five state colleges--College of Charleston, Francis Marion College, South Carolina State College, The Citadel and Winthrop College--should all become or continue to be general-purpose four-year colleges, with in some cases, limited graduate programs restricted to the master's level. Unwise proliferation of master's programs, however, is to be avoided.

The state colleges combined should in time enroll the majority of South Carolina residents seeking undergraduate preparation in public institutions within the state. Their academic programs to the baccalaureate level should therefore be reasonably well-rounded and complete, at least in the more popular areas. Even here, however, some specialization may be expected to

occur, to meet local or area needs not otherwise served. And even here, programs of limited statewide demand may be restricted to one or two of these colleges.

During the decade the state colleges may each be authorized to offer master's degree programs, but only in fields of clearly demonstrated need. At this level, specialization should occur depending upon local and state needs.

Because their principal focus is to be at the baccalaureate-program level, the state colleges should have modest admissions requirements, significantly below those to be established by the universities; but demanding something more than a high school diploma. This condition carries with it a corollary: that these colleges may find it advantageous to offer to some candidates for admission developmental programs (e.g., in English, reading, or mathematics) designed to assist the students in performing college-level work. Such programs have no place in a university, but should be extended as far as the state colleges.

The College of Charleston should become the general-purpose public four-year college in the Charleston area. Its urban location indicates that most of its enrollment should be made up of area residents who commute, not of boarding students. Although one or two master's degree programs may be approved for the College prior to full operational development of the Charleston Consortium (see below), it should be prepared to surrender these to the Consortium when that becomes possible.

Francis Marion College should serve as the general-purpose public commuter college in the Pee Dee, emphasizing those programs of need in that area. Because the population in the area is largely non-urban, a somewhat higher percentage of boarding students may be expected than in an urban area.

South Carolina State College should continue for the foreseeable future its rigorous efforts to move from its former position as a legally segregated institution to full status as a general-purpose institution serving its area of the state. Because this process must be evolutionary, not revolutionary, the college should make an effort to select one or two areas of special competence and devote extra attention to these: education, especially early childhood education, would seem to be a promising field for such endeavor.

The Citadel will remain as the Military College of South Carolina, continuing and developing those baccalaureate curricula specially important to this mission, such as engineering, business, and the physical and mathematical sciences. Although The Citadel has been authorized to offer the M.A.T. in several fields, this has been done in recognition of specific needs not otherwise being met in the Charleston area. The Citadel should be prepared to relinquish these programs to the Consortium when that becomes possible (see below).

Winthrop College can become a general-purpose state college if and only if the legal restraints against the granting of degrees to men, and of the enrollment of men for degree credit, are removed. It is therefore again recommended that these restrictions be removed, and that men be admitted to the college on a commuting but otherwise co-equal basis.

The Charleston Consortium, referred to above, represents the Commission's--and the institutions'--attempts to combine resources of the three public institutions in Charleston, for the public good, in cooperative endeavors none of which the institutions may be capable of achieving independently. Much has already been accomplished in cooperation, particularly at the undergraduate level. Much must yet be done.

To draw upon properly the resources of all three public institutions in the Charleston area, and to promote the orderly development of graduate programs designed to serve specific needs of the Low Country, it is recommended that a Graduate Center be formed. The proposed Center may, or may not, be chartered to grant degrees itself; depending upon details which it is recommended be developed by the Consortium Steering and Policy Committees for submission to the Commission for approval.

Two-Year Post High School Programs

Although the subject of two-year post high school institutions is addressed in Chapter X it is necessary to state here that such institutions, however organized, governed, or operated, should provide educational and training programs primarily responsive to local needs.

These may and should range from a full complement of lower-division college curricula to community service programs. Because such institutions should be located within commuting distance of a majority of the state's population, they should serve commuters only. Because they must reach out to serve not only the disadvantaged but the poorly motivated, they should be relatively inexpensive, and their admissions criteria should be minimal. This last may well mean, for instance, that developmental or remedial work (e.g., in English, in reading, in mathematics) should be provided for those students not meeting normal college admissions criteria, but whose aim is a baccalaureate degree. It certainly means that one of the distinguishing features of the program offered at each of these institutions is a strong, competent, well-staffed guidance or counselling program.

These guidelines given above will provide a rational framework for academic program development by the institutions and the Commission in the coming decade.

CHAPTER IV
FINANCING HIGHER EDUCATION

Introduction

Higher education is expensive. The Department of Health, Education, and Welfare's National Center for Educational Statistics reported that in fiscal year 1969-70 the nation's colleges and universities, public and private, spent \$21.8 billion for current operations. The Center's projections for fiscal 1979-80, in terms of 1969-70 dollars, total \$40 billion.

Higher Education expenditures are also increasing at a rapid rate. The above figures indicate that they will nearly double (up 84% in constant dollars) during the decade of the 70's.

Furthermore, and more alarming, higher education expenditures are expected to increase more rapidly than enrollments. The same National Center for Educational Statistics study forecast that total enrollments during the 70's will increase by 55% as compared to the 84% increase in expenditures.

H.E.W.'s projections of national trends for the 70's, above, reflect a reduction in the rates of increase in spending and enrollments which actually occurred during the decade of the 60's. They reported that current expenditures by the nation's colleges and universities increased by 161% from 1959-60 to 1969-70. During the same period enrollments went up by 115%. So spending increased much faster than enrollments during the 60's, a condition which is expected to intensify during the decade of the 70's.

A greater public awareness of the economic value of additional education, coupled with increased enrollments and higher costs, produced increasingly generous taxpayer support for education during the past decade. People

learned from the U.S. Census Bureau, for example, that workers could expect increasingly higher lifetime income and higher annual income through additional education:

	<u>Lifetime Income Expectancy</u>	<u>Annual Income Expectancy</u>
Elementary school graduate	\$265,000	\$ 5,600
High school graduate	360,000	8,400
College graduate	580,000	12,900

State Support of Higher Education

Whatever the combination of factors, according to M. M. Chambers' 1970 book Higher Education in the Fifty States, appropriations by the 50 states in support of the operating expenses of higher education increased from \$1.4 billion in fiscal 1959-60 to \$6.1 billion in fiscal 1969-70. The \$4.7 billion increase represents a 10-year weighted average percentage increase of 338% for the 50 states. South Carolina's \$41.2 million increase in annual appropriations for higher education during the same period (rising from \$12.1 million to \$53.3 million) amounted to 340%, almost identical to the 50-state average.

The Southern Regional Education Board, in its latest (1970) Fact Book on Higher Education in the South, indicates that South Carolina's state appropriations to its public colleges and universities are relatively large per student. 1969-70 appropriations per student are listed at \$1,306 for Virginia, \$1,345 for Florida, \$1,555 for Georgia, \$1,556 for South Carolina and \$1,806 for North Carolina. The 15-state southern average 1969-70 appropriation is stated to be \$1,239 per student. The South Carolina figures are distorted by inclusion of appropriations for operation of a hospital and clinics by the Medical University of South Carolina as well as agri-

cultural extension and inspection services of Clemson University. Such appropriations have little relation to the number of students enrolled. Nevertheless, the listing is useful, and reflects, among other things, the relatively small proportion of inexpensive two-year colleges in South Carolina's public higher education mix.

Despite good support of its existing public colleges and universities, the SREB Fact Book points out that South Carolina continues to appropriate for higher education a relatively small proportion of its total tax revenue. In 1967-68, the latest year for which SREB had adequate data, South Carolina appropriated 8.5% of total tax revenue to support higher education operations. This was the lowest percentage among southern states, which averaged 12.3%, and was lower than the 12.1% national average. South Carolina is also shown by the SREB Fact Book to have had a similarly low ranking in 1959-60, when its higher education appropriations were 5.1% of tax revenue compared to the southern and national averages of almost 8%. The April issue of Grapevine contains another relevant analysis of 1969 state "investments in" (appropriations for) operation of higher education which places South Carolina 47th in terms of "ratio of investment to total personal income". (The state appropriation figures employed by SREB and Grapevine would have been improved by including some of the state support for the South Carolina Technical Education Centers. On the other hand, as mentioned earlier, the South Carolina figures are inflated by inclusion of the entire state support for public service activities such as the Medical University hospital and Clemson's agricultural extension and inspection. Similar adjustments might also improve the data for other states, but the overall conclusions are highly indicative.)

Since South Carolina appears to appropriate for higher education a relatively low percentage of its tax revenue, it is disturbing to note in another recent study that South Carolina's state and local taxes are comparatively light both per capita and as a proportion of personal income. Kenneth E. Quindry's study State and Local Revenue Potential states that South Carolina local and state taxes in 1969 amounted to \$87 per \$1,000 of personal income. This was second lowest among all southern states, which averaged \$94, and 45th among the 50 states, which averaged \$104. Similarly, 1969 state and local taxes per capita in South Carolina were \$228 compared to the southern and 50 state averages of \$286 and \$383, respectively.

Quindry also pointed out that South Carolina state and local tax revenues are comparatively low almost entirely because of a very low general property tax yield. About \$157 million of additional revenue would have been obtained in 1969 if general property could have been taxed at nationally average rates.

An even more important insight into South Carolina's tax revenue potential is obtainable from Quindry's study. Although South Carolinians are taxed comparatively lightly per capita and as a percent of personal income, they are taxed rather heavily in relation to their ability to pay. This conclusion comes from dividing state and local taxes as a percentage of personal income by the per capita personal income of the state. The resultant ranking in accordance with relative "tax effort" places South Carolina seventh highest among the 15 southern states and 17th in the Nation.

Tuition and Fees

Tuition and fees required of students attending the South Carolina

public colleges and universities during academic year 1971-72 are summarized in the following table:

TABLE I
Tuition and Required Fees, 1971-72

	<u>In-State Residents</u>	<u>Out-of-State Residents</u>	<u>Differential</u>
Clemson Univ. (incl. \$50 health fee)	\$640	\$1,340	\$700
University of South Carolina	550	1,260	710
College of Charleston	700	1,400	700
Francis Marion College	410	910	500
Winthrop College (incl. \$50 health fee)	470	1,100	630
S. C. State College	460	940	480
The Citadel	557	1,207	650
Medical Univ. (medical/dental)	900	1,650	750
" " (nursing/pharmacy)	550	850	300
" " (allied health)	125	325	200

A current compilation of tuition charges and required fees (excluding separately identified health fees), conducted by the Tennessee Higher Education Commission (See Table II) shows that the University of South Carolina's in-state student charges, above, are third highest among "major state universities" (the state university plus any other university awarding 100 Ph.D.'s annually) in eleven southeastern states. U.S.C.'s out-of-state charges are fourth highest in this group.

**Median Tuition and Fees, In-State and Out-of-State,
Southeastern States, 1971-72**

State	Major State Universities			Other State Universities and Colleges		
	In-State	Rank	Out-of-State	Rank	In-State	Rank
Arkansas	\$375	8	\$ 905	9	\$387	6
Florida	570	1	1,620	1	570	1
Georgia	405	5	540	11	315	8
Kentucky	330	9	1,030	7	300	9
Louisiana	320	10	820	10	220	10
Mississippi	506	4	1,106	6	400	5
North Carolina	398	6	1,473	2	408	4
South Carolina	550	3	1,260	4	513	2
Tennessee	378	7	993	8	328	7
Texas	213	11	1,293	3	213	11
Virginia	556	2	1,123	5	490	3

The right-hand compilation, above (which includes Clemson), covers all other four-year state colleges and universities (excluding medical colleges). Average (median) in-state charges of the six South Carolina institutions are second highest among the averages for the colleges and universities of the eleven southeastern states. The South Carolina institutions' out-of-state charges are fourth highest.

A survey sponsored by the National Association of State Universities and Land-Grant Colleges, as reported in the July 15, 1971 issue of Higher Education and National Affairs, found that 1970-71 undergraduate tuition and fees of the 98 institutions responding averaged \$470 for in-state students. Out-of-state tuition and fees averaged \$1,119. The average in-state/out-of-state differential was therefore \$649.

Tuition and required fees of the South Carolina public colleges and universities appear to be among the highest charged by comparable southern institutions. They are also very much in line with national practice, including in-state/out-of-state differentials.

Comparative Revenue Sources

The Commission on Higher Education, in cooperation with the public colleges and universities, has developed a higher education management information system which produces reliable, essential data based on uniform definitions, classifications and reporting formats. A product of the Commission's information system is the following analysis of fiscal year 1969-70 educational and general revenue sources of six South Carolina public colleges and universities. Francis Marion College and the College of Charleston were not in operation as state colleges during 1969-70, the latest completed year

for which financial reports are available. Clemson University's agricultural public service activities and the Medical University hospital and clinics are excluded for comparability purposes and because they are separately funded.

TABLE III

Analysis of 1969-70 Educational and General Revenues

Revenue Source	U.S.C.	Clemson (Ex. Ag. Services)	Winthrop	Citadel	S.C. State	MUSC (Ex. hsp.)
Student Fees (excluding Tuition, etc. for debt service)	23%	18%	15%	26%	5%	1%
State Appropriations (for operations)	60%	65%	79%	72%	76%	62%
Federal Appropriations	-	1%	1%	-	3%	-
Sponsored Research	5%	7%	2%	-	-	11%
Other Sponsored Programs	10%	3%	3%	-	13%	10%
Recovery of Indirect Costs (of Sponsored Research/Programs)	1%	1%	-	-	1%	6%
Other Sources	<u>1%</u>	<u>5%</u>	<u>-</u>	<u>2%</u>	<u>2%</u>	<u>10%</u>
Total Educational and General Revenues	100%	100%	100%	100%	100%	100%

The above analysis is based on accurate reports prepared using American Council on Education terminology and accounting principles. Nevertheless, it is not possible to determine directly from it the relative proportions of the institutions' costs paid by students and state appropriations. This is because it correctly excludes items such as student tuition income used to

pay interest and principal on bonds, as well as indirect state appropriations for personnel retirement and social security. It is also distorted by income from sponsored research and other sponsored programs (which are self-supporting, non student-related activities) and does not include major student costs for room and board.

In order to obtain a more realistic understanding of comparative revenue sources, the Commission employed the following approach, using Winthrop College as an example:

TABLE IV

Who Paid For Winthrop's 1969-70 Costs? (1)

<u>Students:</u>		
Fees for operations	\$ 762,703	9%
Tuition, etc. for debt service	584,970	7%
Auxiliary Enterprises (room & board, etc., excluding \$3,300 for faculty & staff housing)	<u>2,819,694</u>	<u>32%</u>
Total Students	\$4,167,367	48%
<u>State Taxpayers:</u>		
Appropriation for operations	\$3,968,400	45%
Appropriation for retirement and social security	<u>460,411</u>	<u>5%</u>
Total State Taxpayers	\$4,428,811	50%
<u>U.S. Taxpayers:</u>		
Appropriations for operations	\$ 71,473	1%
Student Aid	<u>29,201</u>	<u>-</u>
Total U.S. Taxpayers	\$ 100,674	1%
<u>Others:</u>		
Student Aid	\$ 80,294	1%
Miscellaneous	<u>20,586</u>	<u>-</u>
Total Others	\$ 100,880	1%
 Total Revenues of Winthrop College plus Tuition and Retirement		
	\$8,797,732	100%

(1) Excluding \$229,473 for Sponsored Research and Other Sponsored Programs

The above Table IV indicates that students paid almost half of Winthrop's student-related costs in 1969-70, rather than only 15% as shown in preceding Table III. By employing a similar approach for the other public colleges and universities the following relationships were obtained. (And future relationships reasonably comparable to Winthrop and The Citadel are anticipated for Francis Marion College and the College of Charleston).

TABLE V
1969-70 Student/State Financial Support Ratios

	<u>U.S.C.</u>	<u>Clemson (Ex. Ag. Stations)</u>	<u>Winthrop</u>	<u>Citadel</u>	<u>S.C. State</u>	<u>MUSC (Ex. Hsp.)</u>
Student Fees and Charges	44%	36%	48%	51%	26%	7%
State Appropriations	53%	56%	50%	43%	68%	79%

It is not the intention to emphasize variations among institutions in the above tabulation. The main point is that students and their families pay a substantial share of the institutions' operating costs.

Current Level of State Appropriations

Current and recent year state appropriations to the South Carolina public colleges and universities are listed below:

TABLE VI

South Carolina Taxpayer Support for Current Operations
of Public Colleges and Universities
(thousands of \$)

	1969-70	1970-71 Original	1970-71 Final	1971-72 Revised
	<u>Appropriations</u>	<u>Appropriations</u>	<u>Appropriations</u>	<u>Appropriations</u>
UNIV. OF S.C.				
Main Campus	\$14,804	\$17,101	16,168	20,728
Regional Campuses	1,530	1,559	1,465	2,122
Total USC	16,334	18,660	17,633	22,850
CLEMSON UNIV. (ACADEMIC)				
Main Campus	10,869	12,267	11,605	13,906
Regional Campuses	255	310	244	270
Total Clemson	11,124	12,577	11,849	14,176
WINTHROP COLLEGE	3,968	4,370	4,130	4,587
THE CITADEL	3,429(1)	3,790	3,581	4,041
S.C. STATE COLLEGE	3,944	4,469	4,223	4,457
FRANCIS MARION COLLEGE	-	1,010(2)	1,010(2)	1,641(2)
COLLEGE OF CHARLESTON	-	300	300	1,998(2)
TOTAL 7 COLLEGES/UNIVS.	\$38,800	\$45,175 (16.4% over 1969-70)	\$42,726 (10.1% over 1969-70)	\$53,749 (19.0% over orig. 1970-71) (25.8% over final 1970-71)
MEDICAL U. OF S.C. (ACADEMIC)	8,468	10,133	9,576	10,507
TOTAL 8 COLLEGES/UNIVS.	\$47,268	\$55,308 (17.0% 1969-70)	\$52,302 (10.6% 1969-70)	\$64,256 (16.1% over orig. 1970-71) (22.9% over final 1970-71)

- (1) plus \$50,000 supplementary 1968-69 appropriation
(2) plus use of tuition income for current ("start-up") operations

Appropriations for 1971-72 to the eight public colleges and universities, including only the academic divisions of the Medical University and Clemson, totaled \$64,256,000, an increase of 16.1% over the corresponding original appropriations for 1970-71. The latter were 17% over 1969-70. Appropriations for operation of the Medical University hospital and clinics (\$5,921,000 for 1971-72) and for the conduct of Clemson University's agricultural experiment, extension and inspection services (\$6,147,000 for 1971-72) are not included in the above Table VI tabulation; such amounts are not considered to have significant relation to the number of students enrolled.

A rough measure of the comparative level of state taxpayer support being accorded the individual state colleges and universities is obtained by relating total dollar appropriations to the number of students enrolled. The most appropriate student count for this purpose is generally accepted to be full-time equivalent (FTE) students. FTE students are determined by dividing the total number of semester credit hours being taught by what is considered to be a normal course load for a student at a given level. The agreed upon standard divisors used to determine FTE students are 15 at the undergraduate and first professional levels, 9 at the master's level and 6 at the doctorate level. Credit hour production is not yet fully determinable at the Medical University, so their headcount students are temporarily accepted to be full-time equivalent students as well. FTE students are listed below in Table VII.

TABLE VII

**Full-Time Equivalent (FTE) Student Enrollments
South Carolina Public Colleges and Universities**

	Actual Fall 1969	Actual Fall 1970	Actual Fall 1971
UNIVERSITY OF S.C.			
Main Campus	11,884	12,954	14,794
Regional Campuses	2,652	2,809	3,537
Total USC	14,536	15,763	18,331
CLEMSON UNIV. (ACADEMIC)			
Main Campus	7,023	7,720(1)	8,497(1)
Regional Campuses	265	404	450
Total Clemson	7,288	8,124	8,947
WINTHROP COLLEGE	3,367	3,556	3,702
THE CITADEL	2,504	2,543	2,700
S.C. STATE COLLEGE	2,021	1,976	2,188
FRANCIS MARION COLLEGE		770	1,237
COLLEGE OF CHARLESTON		796	1,466
TOTAL 7 COLLEGES/UNIVS.	29,716	33,528 (12.8% over 1969)	38,571 (15.0% over 1970)
MEDICAL U. OF S.C. (ACADEMIC)	1,021(2)	1,185(2)	1,458(2)
TOTAL 8 COLLEGES/UNIVS.	30,737	34,713 (12.9% over 1969)	40,029 (15.3% over 1970)

(1) Excludes 50-58 FTE students in Clemson-Furman MBA Program.
(2) Includes 154-191-206 hospital interns and residents.

and Board and General Assembly. In order to perform these functions effectively, current and recent year appropriations per student, obtained by dividing Table VII data into Table VI data, are shown in the following Table VIII.

Current state budget figures are not adequate vehicles for presenting, analyzing and recommending college and university appropriation requests.

TABLE VIII

Average Appropriations to Public Colleges and Universities
for Each Enrolled Full-Time Equivalent Student

	1969-70 Appropriations Per Fall 1969 FTE Student	1970-71 Final Appropriations Per Fall 1970 FTE Student	1971-72 Appropriations Per Fall 1971 FTE Student
UNIVERSITY OF S.C.			
Main Campus	\$1,246	\$1,247	\$1,401
Regional Campuses	577	524	600
Total USC	1,124	1,119	1,247
CLEMSON UNIV. (ACADEMIC)			
Main Campus	1,548	1,502	1,637
Regional Campuses	962	725	600
Total Clemson	1,526	1,463	1,584
WINTHROP COLLEGE	1,178	1,161	1,239
THE CITADEL	1,369	1,408	1,497
S. C. STATE COLLEGE	1,952	2,137	2,037
FRANCIS MARION COLLEGE	-	1,312*	1,326*
COLLEGE OF CHARLESTON	-	377	1,363*
7 COLLEGES/UNIVS. - MAIN CAMPUS	1,381	1,353 (2.0% under 1969-70)	1,483 (9.8% over 1970-71) (7.5% over 1969-70)
7 COLLEGES/UNIVS. - ALL CAMPUSES	1,306	1,274 (2.5% under 1969-70)	1,394 (9.4% over 1970-71) (6.7% over 1969-70)
MEDICAL U. OF S.C. (ACADEMIC)	8,290	8,081	7,206
8 COLLEGES/UNIVS.	1,538	1,507 (2.0% under 1969-70)	1,605 (6.5% over 1970-71) (4.4% over 1969-70)

*Plus retained tuition.

It is particularly noteworthy that the average 1971-72 appropriation (excluding the Medical University) was \$1,394 per student. This was only 6.7% higher than in 1969-70 (two years earlier). The substantial differences in per student appropriations to the various institutions are not easily explained or justified.

Present Method of Determining Appropriations
for Public Colleges and Universities

In order to obtain state financial support for their operations, the South Carolina public colleges and universities submit annual appropriation requests. These are prepared on forms designed for the conventional departments and agencies of state government, require detailed ("line item") estimates of supplies, travel, telephone, etc., and are accompanied by increasingly voluminous supporting data. The completed forms become the basis for Budget and Control Board review and recommendation, and for General Assembly consideration and action. The ultimate result is a "lump sum" appropriation for the operation of each college or university during the ensuing fiscal year.

Currently, the college and university appropriation requests go first to the Commission on Higher Education. This enables the Commission to study their requests and to make appropriate recommendations to the Budget and Control Board and General Assembly. In order to perform these functions effectively, the Commission has found it necessary to require an entirely different type of presentation, along with special supplementary analyses. The conventional state budget forms are not adequate vehicles for presenting, analyzing and recommending college and university appropriation requests.

Unfortunately, the Commission's need for data from the colleges and universities has not been offset by a reduction in the type of budgetary documentation required of state agencies generally. This has burdened the colleges and universities with a heavy load of paperwork, not all of it justifiable on the basis of usefulness. Despite all of the forms and reviews, appropriations for the colleges and universities in recent years have been "lump sums" based essentially on prior year appropriations plus enrollment growth. The resulting wide variations in appropriation per student, as shown on above Table VIII, raise questions about equity and objectivity.

An Improved Method of Determining Appropriations
for Public Colleges and Universities

The Commission on Higher Education recognized several years ago that a fairer, more objective method was needed for allocating higher education's limited share of state tax revenue among the state's colleges and universities.

The first essential was to obtain reliable statistics concerning the fundamental aspects of statewide higher education. Commencing early in 1969, the Commission, in collaboration with the public colleges and universities, has created a management information system to produce such statistics. The higher learning institutions now routinely prepare for their own use and for the Commission reliable, uniform reports of comparable data on students, faculty, physical facilities, staff, revenues, expenditures, etc. An illustrative comparison of some essential faculty and student statistics, taken from fall semester 1970 reports, is reproduced below:

TABLE IX

Fall 1970 Student/Faculty Data Summary

	U.S.C. Main Campus	Clemson Main Campus	Winthrop	Citadel	S.C. State	Francis Marion	College of Charleston
<u>STUDENT HEADCOUNT</u>	13,558	7,601	3,910	2,665	2,148	906	1,040
% Male	66	78	2	91	47	66	36
% South Carolinian	75	81	89	62	94	99	90
% White	98	98	95	98	4	91	86
<u>FTE STUDENTS</u>	12,954	7,770	3,556	2,543	1,976	770	796
% Lower Division (Fresh., Soph.)	56	58	65	61	63	88	79
% Upper Division (Jun., Sen., etc.)	25	33	31	35	31	12	21
% Professional (Law)	5						
% Graduate 1st Level (Master's)	10	7	4	4	6		
% Graduate 2nd Level (Doctorate)	4	2					
<u>FTE TEACHING FACULTY</u>	790.4	593.2	190.0	158.3	133.6	37.0	52.9
% Professors	17	13	18	17	14	7	18
% Associate Professors	17	28	19	23	24	24	15
% Assistant Professors	27	27	35	59	31	28	56
% Instructors	13	9	22	1	28	41	
% Teaching Assistants	21	20	6		1		11
% Other (Lecturers, etc.)	5	3			2		
<u>SEMESTER CREDIT HOUR PRODUCTION</u>	181,930	111,656	52,509	37,550	28,881	11,555	11,947
Per FTE Teaching Faculty	230	188	276	237	198	354	226
<u>PRODUCTION PROFILE (Scheduled Teaching Hours to Produce 1 Credit Hour)</u>	1.26	1.29	1.13	1.12	1.46	1.13	1.15
<u>FTE STUDENT/FTE FACULTY RATIO</u>	16.4	13.1	18.7	16.1	14.7	20.8	15.1
<u>SCHEDULED TEACHING HOURS PER WEEK PER FTE FACULTY</u>	10.0	11.5	14.9	12.0	15.6	13.0	12.7
<u>AVERAGE NUMBER OF STUDENTS PER SCHEDULED CLASS</u>	29.3	22.5	22.3	20.5	19.4	27.6	21.3

The availability of reliable current data made it possible for the Commission to proceed with the next step: development of an objective, equitable formula for allocating state tax funds among the higher learning institutions. This project began early in 1971 and was completed by summer. Using the best parts of the "formula budgeting" procedures employed in other states, along with innovations designed especially to meet South Carolina needs, the Commission has developed an "Appropriation Formula" suitable for use in 1972-73 and thereafter. It has already been tested by seven of the eight South Carolina public colleges and universities, using actual 1970-71 data, and has been found by them to yield realistic results. The Appropriation Formula has not yet been fully adapted to the academic division of the Medical University and a Commission objective is to accomplish this.

Complete details of the 1972-73 Appropriation Formula are in Appendix 1 of this Chapter. In brief, its purpose is to allocate scarce higher education dollars among the institutions in accordance with realistic costs of instructing the students they expect to enroll. Nationally proven student/faculty ratios for the various types and levels of instruction are employed along with current South Carolina average faculty salaries plus a factor for faculty support costs. To the instruction costs thereby derived are added appropriation percentages to cover libraries, plant maintenance, general administration, etc. Anticipated income from student fees and other revenues is deducted. The balance represents the justifiable amount of state support requested.

The Commission expects to employ 1972-73 Appropriation Formula results as a guide in making recommendations to the Budget and Control Board and to the General Assembly. For 1973-74 and subsequent years it is recommended

that improved versions of the Appropriation Formula become the primary basis for determining the amount of state support to be received by the state colleges and universities. During a transitional period of several years partial weight should be given to the prior year's funding level, even if not fully justifiable, so as to ensure that no institution suffers unduly through operation of the formula system. It is also assumed that enrollment maxima will be established (as discussed in Chapter II) and that future improvements will include distinguishing between lower division and upper division undergraduate costs. Equitability of appropriation formula results would be enhanced by greater standardization of tuition and fee schedules among the universities and among the colleges; the Commission recommends this. The Commission also recommends that changes in tuition and fee levels, subsequent to final appropriation in accordance with the Appropriation Formula, require approval of the Commission and the Budget and Control Board. It is additionally recommended that the colleges and universities be exempted in the future from preparing appropriation requests in the current manner (which would no longer serve any useful purpose).

How Will South Carolina Public Higher Education Be Financed in the 1970's?

Earlier in this Chapter it was shown that almost all of the operating expenses of the state colleges and universities are financed jointly by the students and the state taxpayers. Student fees alone seem small in comparison with taxpayer support (see Table III), yet students appear to be paying for a substantial share of the cost of their education (see Table IV). What about the future?

A realistic assumption regarding future financing of South Carolina higher education is that the current student-state taxpayer partnership is likely to continue. The U.S. taxpayer's role could increase substantially without having a significant impact.

It appears unrealistic to forecast that the proportionate shares of students and state taxpayers will change radically. This is because the resources of both are already being strained. South Carolina contributes a relatively small share of its tax revenue to support higher education, yet there are many other unsatisfied demands on the state treasury (for kindergartens and school teacher salaries, for example.) Even though a higher proportion of tax revenues might become available for higher education, there are major unsatisfied needs at the two-year college level. And the South Carolina taxpayer seems to be taxed quite heavily in relation to his ability to pay.

From the student's viewpoint, tuition and fees at most of South Carolina's public colleges and universities are currently high in comparison with institutions of other southern states. Although South Carolina's out-of-state student fees are generally competitive with other states, they are likely to increase somewhat, reflecting a trend in other states. Increasing fees for South Carolina students, on the other hand, could work against one of the Commission's continuing goals: to increase from its currently low level the percentage of South Carolina high school graduates participating in some form of higher education. There is evidence that the existing level of fees is keeping numerous South Carolinians out of college.

The Commission has noted with interest some novel financing plans currently under discussion. The "Ohio Plan" proposed by their governor would require all Ohio state college and university students to ultimately repay to

the state the total cost of their higher education. The "mortgaging the future" aspect of this plan does not appear to have achieved much support within Ohio; in South Carolina such a plan could be an even greater financial deterrent. Neither would the Commission favor adoption of a "voucher system" (such as proposed last year in Wisconsin) under which each high school graduate would be given a "voucher" for an equal amount of state funds, the "voucher" being presentable to any of the state's public or private higher educational institutions. Such a plan would represent a radical departure from traditional methods of financing public higher education. Moreover, its "equitability" rationale quickly leads to subsidies for students to attend institutions in other states, and then to equal subsidies for citizens who exercise their rights not to go to college. Nevertheless, the Commission will continue to study improved financing methods.

At the start of this Chapter it was pointed out that the Federal government expects the cost of higher education to virtually double, even without taking inflation into account, during the decade of the 70's. In replying to an informal questionnaire in connection with their "goals for the 70's", the South Carolina public colleges and universities estimated that their educational and general costs, aggregating \$75 million for 1969-70, will rise to \$190 million in 1979-80. They forecast, as a consequence, that their needs for state appropriations (\$47 million in 1969-70) could treble by 1979-80. The magnitude of these projected increases is influenced by an anticipated overall 50% increase in enrollments, along with other factors such as the continuing need to improve faculty salaries.

An appreciation of the impact of faculty salary levels is obtainable from the following analysis:

TABLE X
Analysis of 1969-70 Educational and General Expenditures

<u>Expenditure Functions</u>	<u>U.S.C.</u>	<u>Clemson (Ex. Ag. Services)</u>	<u>Winthrop</u>	<u>Citadel</u>	<u>S.C. State</u>	<u>MUSC (Ex. Hsp.)</u>
Instruction & Departmental Research	52%	52%	50%	49%	48%	47%
Organized Activities Related to Educational Departments	2%	-	2%	-	4%	10%
Sponsored Research	5%	8%	2%	-	-	11%
Other Separately Budgeted Research	2%	2%	1%	-	-	-
Other Sponsored Programs	9%	3%	2%	-	13%	11%
Extension & Public Service	1%	-	-	1%	-	-
Libraries	5%	4%	8%	4%	4%	2%
Student Services	3%	7%	4%	5%	7%	-
Oper. & Maint. of Physical Plant	14%	15%	18%	23%	15%	9%
General Administration	4%	4%	6%	12%	5%	8%
General Institutional Expense	<u>3%</u>	<u>5%</u>	<u>7%</u>	<u>6%</u>	<u>4%</u>	<u>2%</u>
Total Educational and General Expenditures	100%	100%	100%	100%	100%	100%

Half of the South Carolina institutions' Educational and General expenditures are, as shown above, for Instruction and Departmental Research. (This is in line with national experience, which is in the 50% to 60% range.) And faculty salaries constitute more than two-thirds of Instruction and Departmental Research.

In order to keep down the rising cost of South Carolina higher education, then, wouldn't it be a good idea to minimize faculty salary increases? Unfortunately, this could only result in a poorer quality faculty. College and university faculties are highly mobile, and fully aware of conditions in other states. The best members go where conditions, particularly salaries, are favorable. And salaries at South Carolina's state colleges and universities are already low by both regional and national standards. For example, the American Association of University Professors' 1970-71 survey includes the following relevant data (on a scale of 1 to 10, smaller numbers denoting higher ratings):

TABLE XI
1970-71 Faculty Compensation Comparisons

	<u>A.A.U.P. Comparative Rating (Percentile Nationally)</u>			
	<u>Professors</u>	<u>Associate Prof.</u>	<u>Assistant Prof.</u>	<u>Instructors</u>
Univ. of South Carolina	9	10	9	8
Univ. of Georgia	8	7	6	8
Univ. of Florida	9	9	9	8
Univ. of North Carolina (Ch.Hill)	5	6	6	8
Univ. of Virginia	2	4	4	-
Univ. of Maryland	6	8	7	10

How faculty salaries at the other South Carolina institutions compare with those at the University of South Carolina is evident from the following:

TABLE XII

Average Salaries of Instructional Faculty

1970-71, 9-Month Contract Basis (1)
(Summarized from Fall 1970 CHE Reports)

	Professors	Associate Professors	Assistant Professors	Instructors	Total Instructional Faculty (2)
Medical U. of S. C.	\$20,704	\$17,569	\$13,180	\$8,814	\$13,483
USC (Main Campus)	18,001	14,122	12,020	9,213	13,259
Clemson (Main Campus)	16,770	13,860	11,510	8,880	13,045
Winthrop	14,210	13,012	10,602	8,281	11,525
Citadel	15,917	12,768	10,767	7,821	12,281
S.C. State	16,017	11,583	9,914	8,396	10,641
Francis Marion	15,066	12,958	10,127	8,427	10,532
College of Charleston	14,626	12,659	9,728	-	11,059

(1) Averages (mean) include 10 1/2, 11 and 12 month contract salaries converted to 9 month basis using AAUP divisors.

(2) Excludes graduate teaching assistants.

Conclusion

It is, therefore, a foregone conclusion that total educational and general costs of the state-supported higher educational institutions will increase substantially during the decade of the 70's. If the increase should be 84%, the nationwide forecast by HEW's National Center for Educational Statistics, educational and general costs of the eight existing South Carolina colleges and universities will aggregate \$138 million in 1979-80. This is an increase of slightly over 6% per year, without giving any effect to inflation. (Including an annual 4% inflation factor, 1979-80 costs would amount to \$260 million.)

To assist in financing educational and general expenditures of \$138 million, what level of state support should be presumed? One possibility is to assume that the eight institutions will continue to receive their present share of state tax revenues. Total state tax revenues have been rising at an annual rate of about 9%, and continuation of this trend is considered to be a reasonable expectation. Since about 4% of this rate merely reflects inflation, annual real growth in state appropriations to the eight colleges and universities could be at a 5% rate. On this basis, 1979-80 appropriations would total \$77 million in terms of 1970 dollars. This would constitute an average appropriation of \$1,531 per FTE student, slightly less than in 1969-70. (State tax appropriations to higher education would still be below regional and national levels; any improvement in this regard is presumed to be required for two-year colleges.)

Deducting \$77 million of state support from educational and general costs totaling \$138 million leaves \$61 million to be financed from other sources. Assuming current financing proportions, \$31 million should be covered by student fees. This will require a 63% increase in average student fees (rising

to \$616 per student from the 1969-70 figure of \$378), again in constant 1970 dollars. This does not take into consideration student tuition payments, currently averaging \$193 each, which are used for debt service rather than for operating costs of the institutions.

This projection of state appropriations and student fees underscores the desirability of controlling educational and general costs. It is, therefore, the Commission's financial objective for the 70's to foster increased productivity. Each faculty member will have to service more students. Larger class sizes are a partial answer, but use of innovative teaching methods such as computer assisted instruction should be emphasized. Expensive courses catering to few students may have to be merged or abandoned. More efficient administrative practices, including use of modern equipment, must be employed. Adoption of the Commission's new Appropriation Formula, coupled with other recommendations, will encourage greater productivity. It is also an objective of the Commission to develop new and realistic cost-finding and cost comparison procedures for the assistance of the institutions in their endeavors to reduce costs. Total costs will undoubtedly rise, but the best efforts of all concerned must be employed to keep them under restraint.

Appendix I

SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION

1972-73 APPROPRIATION FORMULA

1. Project Main Campus Student Credit Hour Production (by level of instruction and academic area) for the fall 1972 semester. (See CHE Report 14)
2. Divide undergraduate credit hours by 15

professional (law)"	"	"	15
master's level	"	"	9
and doctoral	"	"	6

 to determine the number of FTE students to be taught. (See CHE Report 3)
3. Divide the number of FTE students at each level and in each academic area by an appropriate student/faculty ratio (see attachment) in order to find the number of FTE teaching faculty positions required. Ratios for remedial instruction may be based on own experience (and should be indicated by footnote).
- 4a. Of the total number of FTE teaching faculty positions required, determine the proportion to be filled by teaching assistants. (Use the proportion shown on fall 1970 CHE Report 9, unless justification for a different proportion is presented). Multiply the number of FTE teaching assistants required by \$6,560 + 8.2% (Clemson's fall 1970 average teaching assistant salary plus 4% annual improvement).
- 4b. Multiply the remaining number of FTE teaching faculty positions required by \$13,259 + 8.2% (USC's fall 1970 9-month basis average salary for all teaching faculty except student assistants, plus 4% annual improvement) for the two universities, and by \$12,281 + 8.2% (Citadel's fall 1970 average plus 4% annual improvement) for the five colleges in order to obtain total teaching salary requirements. (See CHE Report 10)
5. For the two universities add 50% and for the five colleges add 40% of total teaching salary requirements to provide for other instruction and departmental research expenses (or faculty support.) This is to cover deans, department heads, secretaries and clerks, laboratory assistants, supplies, equipment, travel, telephone, etc. Faculty salaries plus faculty support equals the proposed Instruction and Departmental Research budget.
6. Add 4% of the Instruction and Departmental Research budget to cover Organized Activities Related to Educational Departments expenditures.

7. Exclude all expenditures for Sponsored Research and Other Sponsored Programs, since these are not considered for state appropriations.
8. Under the caption Other Separately Budgeted Research add amounts requested for operation of special bureaus and institutes. These should normally be limited to amounts appropriated in 1971-72 for operation of such bureaus and institutes plus 4%, modified for any significant change in circumstances.
9. Add 2% of the Instruction and Departmental Research budget for Extension and Public Service expenditures.
10. Add 10% of the I & DR budget to cover Libraries, including acquisitions and operations.
11. Add actual 1970-71 expenditures for Operation and Maintenance of Physical Plant plus 4% per year (8.2% for two years.) If the gross square footage of buildings increases at a faster rate than FTE student enrollments, add such incremental percentage to that year's 4% allowance for general cost increases. Total allowable expenditures for Operation and Maintenance of Physical Plant may not exceed 36% of the I & DR budget.
12. Add 20% of the I & DR budget to cover General Administration, Student Services, and General Institutional Expense.
13. From the total amount computed in paragraphs 1 through 12 subtract anticipated student fee income (other than for debt service), the excess of summer school revenue over summer school expenditures, miscellaneous revenue from sales and services, and any amounts of federal, county or municipal revenues expected to be received in support of current educational and general expenditures. The balance represents the amount of the requested state appropriation for main campus operations.
14. U.S.C. and Clemson should also request a state appropriation of \$600 for each FTE student (determined by dividing projected semester credit hours by 15) expected to be enrolled at regional campuses.
15. Special funding may be requested for starting up new colleges and programs approved by the Commission on Higher Education, bringing a library collection up to minimum standards, etc. These should be listed (and justified) individually, and then added to the amount determined under paragraph 13 (or 14).

Attachment
Appendix I

SOUTH CAROLINA COMMISSION ON HIGHER EDUCATION

STUDENT/FACULTY RATIOS FOR USE WITH
1972-73 APPROPRIATION FORMULA

Undergraduate Programs

Liberal Arts	19:1
Science	17:1
Fine Arts & Architecture	10:1
Teacher Education	19:1
Teacher Education - Practice Teaching	9:1
Agriculture & Forestry	16:1
Engineering	12:1
Home Economics	14:1
Vocational Training	18:1
Physical Training	19:1
Nursing	7:1
Pharmacy	12:1
Business Administration	19:1
Textile Science	12:1
Library Science	18:1
Technology	15:1

Master's and Professional Programs

Liberal Arts	10:1
Science	6:1
Fine Arts & Architecture	6:1
Teacher Education	10:1
Agriculture & Forestry	8:1
Engineering	6:1
Home Economics	8:1
Law	25:1
Social Work	6:1
Library Science	8:1
Nursing	6:1
Business Administration	10:1
Textile Science	6:1

Doctoral Programs

Liberal Arts	5:1
Science	4:1
Teacher Education	5:1
Agriculture & Forestry	4:1
Engineering	4:1
Business Administration	4:1

CHAPTER V
CAPITAL IMPROVEMENTS

Introduction

As a group, the South Carolina state-supported institutions of higher education own an extensive physical plant studded with impressive examples of recent construction. Table I shows that physical plant assets total nearly \$300 million in book value, and of course much higher in replacement cost. Not reflected in Table I is \$58 million made available through the 1970 and 1971 Amendments to the Capital Improvement Bonds Act which provided \$20,947,000 for the University of South Carolina, \$13,452,000 for Clemson University, \$8,995,500 for Francis Marion College, \$5,785,000 for the College of Charleston, \$3,961,500 for the Medical University, \$3,800,000 for South Carolina State College and \$712,500 for Winthrop College.

Much of the physical plant expansion has taken place in the late 1960's. Table II shows that between 1966 and 1970 total space at five institutions increased by 30%, ranging from a low of 5% at The Citadel to a high of 79% at South Carolina State. Table III shows the increase between June 1968 and June 1970 in book value of the same five institutions, with an average increase of 27% and a range from 3% at The Citadel to 57% at South Carolina State. Table III also shows that significant improvements have occurred at the Medical University with book value increasing 65% in two years.

As remarkable as these achievements appear they must be considered in the context of the burgeoning enrollments of the 1960's, comparable increases in faculty and staff, and efforts of the institutions to reach levels of performance that meet the needs of the State. For example: between 1961 and 1969 full-time enrollment in all South Carolina state-supported institu-

tions of higher education increased by 82%; in 1960, the three universities awarded 10 Ph.D.'s compared to 112 awarded in 1970; in 1960, there was no College of Dentistry but in 1970, the Medical University was operating one with an enrollment of 116 and at the same time graduating 81 doctors of medicine compared to 70 in 1960. Since much of the statistical improvement in physical plant was in student residential facilities, institutions were hard pressed to provide adequate academically related space despite significant expansion. In 1970 the shortage of academic facilities became more acute with the addition to the state's system of higher education of two institutions with almost negligible physical plants.

CHAPTER II projects enrollments at all institutions for 1975 and 1980. From these it is clear that the picture of the 1970's will continue to be one of significant increases in enrollment at all state-supported institutions. In its "Statement of Goals" each institution has committed itself to continued improvement in the quality of its programs with an attendant impact on facilities requirements. In the 1970's capital improvement programs of the institutions must continue to ensure adequate expansion to meet demands for space as well as bringing the existing facilities up to standards through renovation and remodeling.

Requirements for Non-Residential Facilities

In their "Statement of Goals" the institutions listed requirements totalling nearly one-third billion 1970 dollars for non-residential facilities by 1980 excluding any requirements for the universities' branches and centers. Eliminating self-financing enterprises such as dining, parking and intercollegiate athletic facilities and deducting projects already funded leaves the following:

Clemson	\$ 40,860,500
College of Charleston	19,040,000
Francis Marion	10,843,000
Medical University	73,360,405
South Carolina State	6,800,000
The Citadel	12,533,297
University of South Carolina	52,803,000
Winthrop	<u>9,880,000</u>
TOTAL	\$226,120,202

The requirements forecast by the institutions are essentially listings of projects based on the enrollment projections made by the individual institutions. To evaluate these listed requirements, this Chapter develops costs for non-residential capital improvements for 1975 and 1980 in the principle categories of construction, land acquisition, campus development, renovation and special costs.

No attempt is made to evaluate the need for residential expansion since the costs of residential facilities are assumed to be met by the revenues from the facilities. It is noted that construction costs for new residential facilities, when combined with operations and maintenance costs, are approaching the point where it is difficult to match costs with revenues. It is also noted that student attitudes toward living in dormitories appear to be changing, and that alternatives to institutionally constructed facilities have been employed successfully (e.g. dormitories constructed and operated by private enterprises on or contiguous to the campus). All of these influences will have impact on planning for any additional residential facilities at the state-supported institutions.

Construction

Table IV shows the assignable square feet per full-time equivalent student at each institution in Fall 1970, and the averages for 92 universities and 298 other four-year institutions in Fall 1968, the latest available.

Starting with the national averages for the 92 universities and the 298 other four-year colleges, and modifying them to meet the particular circumstances at each institution, a requirement for square feet per FTE student was estimated for each institution. These were Clemson - 175; U.S.C. - 135; Citadel, South Carolina State, and Winthrop - 105; College of Charleston and Francis Marion - 91. (The Medical University is discussed in a following section). Multiplying the estimated assignable square feet per FTE student by the FTE enrollment projected for a particular year produced total required assignable square feet for that year. From this was deducted space available in Fall 1970, less any square feet for which funds for razing had been provided. The result was converted to gross square feet by multiplying by 1.5, on the assumption that assignable to gross areas will average 0.66. The gross square feet thus derived was multiplied by \$30 to arrive at an estimated construction cost, stated in 1970 dollars.

The figure of \$30 per gross square foot compares favorably with actual unit cost figures during 1970. It does not cover land acquisition, or any campus development beyond the facility under construction. It does include such items as professional fees, site preparation, furniture, equipment and contingency costs. It is recognized that \$30 per gross square foot may not cover all these items in every project but it is estimated that the capital construction contemplated by the institutions can be substantially completed at this figure.

This process results in the following estimate for new construction, excluding food service facilities. For the College of Charleston, \$1,200,000 already funded through student fees for a library has been deducted from the total.

Total for Construction
(In 1970 Dollars)

	<u>By 1975</u>	<u>Additional By 1980</u>
Clemson	\$ 1,591,920	\$ 1,575,000
College of Charleston	6,440,000	6,930,000
Francis Marion	8,818,015	819,000
S. C. State	-0-	-0-
The Citadel	-0-	-0-
U.S.C.	12,353,220	-0-
Winthrop	4,034,460	945,000

Land Acquisition

Requirements for land were reported by the College of Charleston, Francis Marion, South Carolina State, and the University of South Carolina. In all cases the land is contiguous to the existing campus and considered essential to support any future expansion. The Citadel is undertaking a project in conjunction with the City of Charleston to recover approximately 75 acres of marshland owned by The Citadel and contiguous to its campus. Clemson reported a requirement for land to relocate the Pee Dee Agricultural Experiment Station. The costs for all these acquisitions are as follows:

Total for Land Acquisition
(1970 Dollars)

	<u>By 1975</u>	<u>Additional By 1980</u>
Clemson	\$ 200,000	\$ -0-
College of Charleston	3,292,100	-0-
Francis Marion	420,000	-0-
S. C. State	500,000	-0-
The Citadel	500,000	-0-
U.S.C.	5,000,000	3,600,000
Winthrop	-0-	-0-

Campus Development

Campus development is almost exclusively utilities expansion and improvement. The total amount requested by each institution is as follows:

Total for Campus Development
(1970 Dollars)

	<u>By 1975</u>	<u>Additional By 1980</u>
Clemson	\$1,945,000	\$ -0-
College of Charleston	3,000,000	-0-
Francis Marion	2,150,000	-0-
S.C. State	700,000	-0-
The Citadel	250,000	250,000
U.S.C.	1,800,000	1,000,000
Winthrop	425,000	-0-

Renovations

Each institution reported a requirement for renovations except South Carolina State which reported its physical plant was in good condition. Winthrop reported renovation of a dining facility which is excluded but all other reported renovations are included in the following:

Total for Renovation
(1970 Dollars)

	<u>By 1975</u>	<u>Additional By 1980</u>
Clemson	\$6,598,500	\$1,464,000
College of Charleston	2,125,000	-0-
Francis Marion	300,000	-0-
S.C. State	-0-	-0-
The Citadel	850,000	900,000
U.S.C.	800,000	700,000
Winthrop	-0-	-0-

Special Costs

Clemson reports the following off-campus requirements for Public Service Activities:

Livestock-Poultry Lab, Columbia	\$ 125,000
Pee-Dee Agriculture Station	2,000,000
(Land for above reported under Land Acquisition)	
Other off-campus improvements	300,000
	<u>\$2,425,000</u>

The Capital Improvement Bonds Act Amendment of 1970 included funds for the University of South Carolina to acquire a federally owned office building contiguous to its campus. Acquisition costs are higher than forecast and U.S.C. reports a deficiency of \$1,700,000.

Based on on-site analysis, a requirement is reported at The Citadel for an office addition to Capers Hall (\$841,030) and a new physical education building to meet the unique requirements of the Corps of Cadets (\$2,862,291). Included for these facilities is \$3,703,321.

Total for Special Costs
(1970 Dollars)

	<u>By 1975</u>	<u>Additional By 1980</u>
Clemson	\$2,425,000	\$ -0-
College of Charleston	-0-	-0-
Francis Marion	-0-	-0-
S. C. State	-0-	-0-
The Citadel	3,703,321	-0-
U.S.C.	1,700,000	-0-
Winthrop	-0-	-0-

Total Projected Costs, 1975
(1970 Dollars)

	<u>Construction</u>	<u>Land</u>	<u>Campus Development</u>	<u>Renovation</u>	<u>Special</u>	<u>Total</u>
Clemson	\$ 1,591,920	\$ 200,000	\$1,945,000	\$6,598,500	\$2,425,000	\$12,760,420
College of Charleston	6,440,000	3,292,100	3,000,000	2,125,000	-0-	14,857,100
Francis Marion	8,818,015	420,000	2,150,000	300,000	-0-	11,688,015
S.C. State	-0-	500,000	700,000	-0-	-0-	1,200,000
The Citadel	-0-	500,000	250,000	850,000	3,703,321	5,303,321
U.S.C.	12,353,220	5,000,000	1,800,000	800,000	1,700,000	21,653,220
Winthrop	4,034,460	-0-	425,000	-0-	-0-	4,459,460

The costs listed above reflect the situation in Fall 1970. The Amendments to the Capital Improvement Bonds Act made funds available beginning in January 1971 and the preceeding costs for 1975 must be adjusted to reflect this. U.S.C. reports that all available funds will construct 857,197 assignable square feet and this was subtracted from the assignable square feet of construction projected above. In other cases, the amount made available under the Capital Improvement Bonds Act Amendments is subtracted from total costs.

	<u>Total Projected Costs, 1975</u>	<u>Funded C.I.B.A.</u>	<u>Total Required, 1975</u>
Clemson	\$12,760,420	\$1,591,920 ⁽¹⁾	\$11,168,500
College of Charleston	14,857,100	5,785,000	9,072,100
Francis Marion	11,688,015	8,927,000	2,761,015
S.C. State	1,200,000	-0- (2)	1,200,000
The Citadel	5,303,321	-0-	5,303,321
U.S.C.	21,653,220	700,000 ⁽³⁾	20,953,220
Winthrop	4,459,460	712,500	<u>3,746,960</u>
TOTAL			\$54,205,116

- (1) This amount covers Construction.
- (2) The Capital Improvement Bonds Act Amendment provided \$2,300,000 for an academic and auditorium facility, but since no non-residential construction was projected by the Committee this sum is not considered.
- (3) For acquisition of Federal office building.

Total Additional Required by 1980
(1970 Dollars)

	<u>Construction</u>	<u>Land</u>	<u>Utilities</u>	<u>Renovation</u>	<u>Special</u>	<u>Total</u>
Clemson	\$ -0- (1)	\$ -0-	\$ -0-	\$1,464,000	\$ -0-	\$ 1,464,000
College of Charleston	6,930,000	-0-	-0-	-0-	-0-	6,930,000
Francis Marion	819,000	-0-	-0-	-0-	-0-	819,000
S.C. State	-0-	-0-	-0-	-0-	-0-	-0-
The Citadel	-0-	-0-	250,000	900,000	-0-	1,150,000
U.S.C.	-0-	3,600,000	1,000,000	700,000	-0-	5,300,000
Winthrop	945,000	-0-	-0-	-0-	-0-	945,000
TOTAL						\$16,608,000

(1) After deducting amount funded under the Capital Improvement Bonds Act.

Summary
(1970 dollars)

	<u>Reported By</u> <u>Institution, 1970-1980</u>	<u>Recommended By CHE</u>	
		<u>1975</u>	<u>1980</u>
Clemson	\$ 40,860,500	\$ 11,168,500	\$ 1,464,000
College of Charleston	19,040,000	9,072,100	6,930,000
Francis Marion	10,843,000	2,761,015	819,000
S.C. State	6,800,000	1,200,000	-0-
The Citadel	12,533,297	5,303,321	1,150,000
U.S.C.	52,803,000	20,953,220	5,300,000
Winthrop	9,880,000	3,746,960	945,000
	<u>\$152,759,797</u>	<u>\$ 54,205,116</u>	<u>\$16,608,000</u>

Requirements for the Medical University

In Fall 1969, the Medical University employed two consulting firms to prepare jointly a proposal for physical plant development through 1985. The consultants' report was submitted in Fall 1970, and projected total space requirements, requirements for alterations, and requirements for new construction. All of these requirements are included in the "Statement of Goals" submitted by MUSC, and in terms of square footage appear to be reasonable.

The new construction requirements include the following which are dropped from further consideration (all costs are in 1970 dollars). Student residencies, total cost \$3,435,550, and parking garages, total cost \$6,238,050, are facilities which are assumed to be self-liquidating, although the 1970 Amendment to the Capital Improvement Bonds Act provided \$1,710,000 toward the parking garages. The Eye Institute, total cost \$2,706,050, will be financed from private sources. The auditorium, seating 1,000 and costing \$1,162,700, is given a low priority by MUSC; the Commission believes it cannot be supported at this time.

In Summer 1971, MUSC submitted an application to build a Clinical Science Building, reflecting a requirement included in the physical plant development plan. Total cost approved by the Commission was \$18,986,698 including \$6,510,747 from state sources, the balance from federal programs. Already funded is \$1,681,500 under the Capital Improvements Bond Act, leaving a balance of \$4,829,247 to be funded.

The remaining construction requirements are for five facilities, at a total cost in 1970 dollars of \$30,026,000 for construction, \$9,373,000 for professional fees, furniture and miscellaneous expenses attendant on construction, and \$3,249,950 for demolition, site development, utilities and miscellaneous. Unit costs per gross square foot for construction which the consultants employed are shown below; unit costs including the "add-ons" are also shown.

	<u>Construction</u>	<u>Total</u>
Basic Science	\$63	\$92
Nursing/Allied Health	48	64
Student Center	48	60
Library Addition	45	62
Plant Maintenance et al	28	35

For the Basic Science facility, in this report an average unit cost in 1970 dollars of \$45 per gross foot is employed to include all costs. This is a 50% increase over that employed in other instances, to allow for special construction and equipment for this facility. It compares favorably with the actual cost of \$42.15 (1968 dollars) to construct and equip the Basic Sciences - Dental School facility which opened in Fall 1970. The facility

totals 336,856 gross square feet, projecting a requirement for \$15,158,520. The four remaining facilities total 200,012 gross square feet and at \$30 per square foot project a requirement for \$6,000,360, a total construction cost of \$21,159,000.

For campus development to support the facilities, 10% of construction costs or \$2,116,000 is included.

The consultants recommend the acquisition of two city blocks of land now separating the Main Campus and Alumni Memorial House. The physical plant development plan includes a requirement for only one of the two blocks. Estimated costs are \$2,000,000 per block; this report includes \$2,000,000 to acquire land essential for capital expansion.

The consultants report that 210,185 net square feet in seven existing buildings will require alterations, and project a cost of \$4,981,200 for construction, \$1,412,900 for professional fees, furniture and miscellaneous expenses, and \$383,505 for demolition, site development, utilities and miscellaneous. A total of \$5,000,000 to cover all costs is included in this report.

The total projected for MUSC includes the following in 1970 dollars:

Clinical Science Building (required now)		\$ 4,829,247
Other: Construction	21,159,000	
Campus Development	2,116,000	
Land Acquisition	2,000,000	
Alterations	<u>5,000,000</u>	
		<u>30,275,247</u>
TOTAL		\$35,104,494

Based on the projections presented by the consultants, 75% of the funds for construction, campus development and land, and 20% for alterations are recommended in 1975, the balance in 1980.

Financing Capital Construction

Federal Assistance

The federal programs authorizing significant amounts for capital improvements of the type under construction include Section 104, Title I, Higher Education Facilities Act of 1963 (construction of undergraduate facilities); Part I, Title III, Public Health Services Act (medical library construction); Part B, Title VII, PHSA (construction of teaching facilities for medical, dental and other health personnel); Part G, Title VII, PHSA (construction of teaching facilities for allied health professions personnel); Part A, Title VIII, PHSA (construction of teaching facilities for nursing personnel). All authorize substantial federal assistance, ranging up to two-thirds total construction or rehabilitation costs.

For the fiscal year ending June 30, 1971, Congress appropriated \$-0- for Section 104, Title I, HEFA; \$-0- for Part I, Title III, PHSA; \$141 million for Part B, Title VII; \$-0- for Part G, Title VII; and \$9.5 million for Part A, Title VIII. For the fiscal year ending June 30, 1972, Congressional funding of Section 104, Title I, HEFA provided only \$339,132 for all South Carolina institutions. For the other programs, Congress appropriated \$-0- for Part I, Title III; \$142 million for Part B, Title VII; \$-0- for Part G, Title VII; and \$19.5 million for Part A, Title VIII.

It is not possible to make projections of what Congress might appropriate for these programs in future years, but it is assumed the institutions will take full advantage of any federal assistance which might be available. One point bears emphasis--that the institutions must be in a position to move rapidly in order to take advantage of any federal funds which might be avail-

able for essential construction. This Long-Range Planning project will ensure that requirements have been determined and plans are available from which applications for federal support can be expeditiously prepared. But in all cases matching funds are a requirement, and steps must be taken to assure their availability.

State Institution Bonds

For a number of years, state-supported institutions of higher education have financed capital improvements through the State Institution Bonds Act. Under this Act, the tuition collected by each institution is deposited with the State Treasurer for credit against bonds issued by the institution for capital improvements. Each improvement and bond issue must be approved by the State Budget and Control Board, and restrictions limit the amount of bonds that may be issued at any time, although all tuition fees collected are made available to the institution for this purpose. Until the 1970 Amendment to the Capital Improvement Bonds Act, virtually all state funds for capital improvements at the state-supported institutions were provided under the State Institution Bonds Act. It is assumed the older institutions will continue to have this authority, and it will be extended to the College of Charleston and Francis Marion effective September 1972.

Shown below is the State Institution Bonds Act indebtedness of each institution as of April 30, 1971, and the total tuition fees collected during the 1970-71 academic year applicable against such indebtedness.

	State Institution Bonds Outstanding	Tuition Fees Collected
Clemson	\$10,650,000	\$1,353,943
College of Charleston	-0-	-0-
Francis Marion	-0-	-0-
Medical University	800,000	468,598
South Carolina State	1,650,000	278,115
The Citadel	4,735,000	479,401
University of South Carolina	17,855,000	2,309,507
Winthrop	3,850,000	579,720

Assuming that no additional State Institution Bonds are issued, that there are no tuition changes, and that the total tuition fees collected annually increase in the same proportion as the total annual enrollment increases as forecast by Table V, Chapter II, on June 30, 1975 the institutions will have the capacity for additional capital funding through State Institution Bonds as shown in the Column (2) of the following table:

	(1) <u>1975</u>	(2) <u>1975</u>	(3) <u>1975</u>
	CHE Forecasted Requirements (1970 dollars)	State Institution Bonds Capacity (1970 dollars)	Unfunded Requirements (1970 dollars)
Clemson	\$11,168,500	\$3,002,300	\$ 8,166,200
College of Charleston	9,072,100	3,181,800	5,890,300
Francis Marion	2,761,015	4,500,000	-0-
Medical University	24,885,497	6,118,300	18,767,197
South Carolina State	1,200,000	1,426,700	-0-
The Citadel	5,303,321	561,600	4,741,721
University of S.C.	20,953,220	7,953,100	13,000,120
Winthrop	3,746,960	3,695,000	51,960
TOTAL	\$79,090,613	-	\$50,613,498

It must be emphasized that the above requirements are stated in 1970 dollars. In no area has inflation been a greater problem than in construction. Engineering News-Record reports that if the rate of increase in construction costs continue, before the end of 1972, the 1970's will have added more dollars to construction costs than did the entire 1960's. College Management Cost of

Building Index jumped from 130.6 in 1968 to an estimated 158.6 in 1971, an increase of 21.5% in three years. To illustrate the impact of inflation, if the rate is assumed to be 6% annually, the 1975 requirement shown above as nearly \$80 million in 1970 dollars will have to be adjusted to \$107 million by 1975.

If tuition were increased, the institutions could achieve increased bonding capacity and would be in a position to finance a greater share of the requirements. As is discussed in Chapter IV, in future years there will undoubtedly be an increase in the cost of education paid by the student but the increase will probably be necessary just to offset increased costs in operation and maintenance. And even if some additional bonding capacity could be achieved through increased tuition, it is unlikely it would be adequate to meet all requirements for capital improvements.

State Capital Improvements Bond Act

In 1970, the General Assembly amended the State Capital Improvements Bond Act to provide \$47.5 million for all state-supported institutions except The Citadel. A 1971 Amendment added \$10.1 million for the College of Charleston and Francis Marion. As indicated above, there will be a significant amount required by the institutions in 1975 for capital improvements beyond their own bonding capacity. It is recommended the Capital Improvements Bond Act be amended to provide an additional \$50 million by 1975 for the public institutions of higher education.

TABLE I
Physical Plant Assets
June 30, 1970⁽¹⁾

	<u>Book Value of Assets</u>			
	<u>Land</u>	<u>Buildings</u>	<u>Equipment</u>	<u>Total</u>
Clemson, Main Campus	\$13,940,186	\$ 49,288,064	\$ 15,645,670	\$ 78,873,920
College of Charleston	1,904,632	(2)	(2)	1,904,632
Francis Marion ⁽³⁾	270,000	873,500	500,000	1,643,500
Medical University	2,821,166	22,601,918	9,925,182	35,348,266
S.C. State	1,050,794	12,341,240	2,476,758	15,868,792
The Citadel	10,000,000	16,482,510	2,748,674	29,231,184
U.S.C., Main Campus	24,065,954	62,763,063	18,254,096	105,083,113
Winthrop	2,873,840	22,867,300	3,889,355	29,630,495
TOTAL	\$56,926,572	\$187,217,595	\$ 53,439,735	\$297,583,902

(1) As reported in HEGIS "Financial Statistics of Institutions of Higher Education for Fiscal Year Ending 1970."

(2) Not reported.

(3) As reported informally by Francis Marion, which existed as the Florence Campus, U.S.C. on June 30, 1970.

TABLE II

Growth of Physical Plant Space
1966-1970
Total Gross Square Feet

	<u>1966(1)</u>	<u>1970(2)</u>	<u>% Change</u>
Clemson, Main Campus	3,002,942	3,728,096	24.1
S.C. State	626,566	1,119,384	78.6
The Citadel	1,218,198	1,281,820	5.2
U.S.C., Main Campus	2,763,040	3,816,468	38.1
Winthrop	<u>1,275,352</u>	<u>1,603,161</u>	<u>25.7</u>
TOTAL	8,886,098	11,548,929	29.9

- (1) Harold L. Dahnke, A Space Utilization Study for Five State-Supported South Carolina Colleges and Universities, November 1, 1967, Table 3.1. The Medical University was excluded from this study.
- (2) As reported in HEGIS "Inventory of College and University Physical Facilities (September 30, 1970)".

TABLE III

Growth of Physical Plant Assets
June 30, 1968 to June 30, 1970
Book Value of Land, Buildings, and Equipment(1)

	<u>1968</u>	<u>1970</u>	<u>% Change</u>
Clemson, Main Campus	\$ 61,759,122	\$ 78,873,920	27.7
S.C. State	10,114,961	15,868,792	56.8
The Citadel	28,428,755(2)	29,231,184	3.1
U.S.C., Main Campus	78,496,675	105,083,113	33.8
Winthrop	<u>24,344,042</u>	<u>29,630,495</u>	<u>21.7</u>
Subtotal	\$203,143,555	\$258,687,504	27.3
Medical University	<u>21,402,853</u>	<u>35,348,266</u>	65.1
TOTAL	\$224,546,408	\$294,035,770	30.9

- (1) As reported on HEGIS "Financial Statistics of Institutions of Higher Education."
- (2) In 1968 The Citadel reported land value as \$977,000 and in 1970 as \$10,000,000. This table assumes the 1968 value to be \$9,770,000.

TABLE IV
Assignable Square Feet Per FTE Student(1)

	<u>Non-Residential Facilities</u>							
	<u>100(2)</u>	<u>200</u>	<u>300</u>	<u>400</u>	<u>500</u>	<u>600</u>	<u>700</u>	<u>Total</u>
Clemson	23.7	56.7	30.6	15.8	24.7	40.3	18.7	210.5
College of Charleston	21.7	12.8	34.5	8.0	20.8	40.0	5.1	142.9
Francis Marion	10.4	4.8	18.3	3.8	0	7.0	4.1	48.4
S.C. State	33.8	43.2	31.9	13.4	157.4	28.5	16.1	324.3
The Citadel	17.4	10.0	14.2	7.4	51.6	32.7	18.6	151.9
U.S.C. (Including Midlands)	11.2	16.2	21.9	9.5	8.5	8.7	10.3	86.3
Winthrop	21.0	18.7	24.0	21.1	11.2	43.4	10.3	149.7
92 Universities	11.0	33.0	27.0	11.0	17.0	22.0	14.0	135.0
298 Other 4-year and over insti- tutions	14.0	17.0	13.0	8.0	13.0	18.0	8.0	91.0

- (1) As reported in CHE Tables distributed January 20, 1971. South Carolina institutions as of Fall 1970, others as of Fall 1968.
- (2) 100 - Classrooms; 200 - Laboratories; 300 - Offices; 400 - Library; 500 - Special Use; 600 - General Use; 700 - Supporting.

CHAPTER VI

FACULTY

Introduction

Since the quality of educational programs within the colleges and universities of South Carolina depends largely on the quality of the faculty, the recruitment and retention of well qualified faculty members is a matter of concern to the Commission. Well-articulated statements of policy and procedures can be a great assistance. Even though details of policies and procedures may appropriately vary from university to university and from college to college, there are elements that should be common to all.

This chapter contains information compiled from faculty handbooks, questionnaires, reports, and other material provided by the institutions, as well as discussion with administrative officers and faculty members. Findings reveal many variations in policy among the public institutions. In some areas, general guidelines should be established at the state level in order to assist institutions in developing specific policies.

Evaluation

Although there is almost universal agreement that evaluation of faculty members is necessary and desirable, there is less agreement on how it should be done. Who shall be evaluated? How and on what basis shall an evaluation be made? Who shall make the evaluation? To what uses will the results be put?

The majority of the institutions in South Carolina now have some form of periodic faculty evaluation and all agree that an evaluation should be made with the primary purpose of improving teacher effectiveness. The secondary purpose of such information is to assist the institution in granting merit increases, promotions, and tenure. There is substantial variation in who

designs the evaluative instruments. It is generally felt that the development of instruments for the evaluation of faculty is and has been the domain of administrators, especially that of deans and department heads. However, more and more institutions are involving the students, alumni, and faculty members.

The public institutions of higher learning in South Carolina have acted in a manner befitting their own problems, programs, student body, philosophy, and goals, and all are in accord that no attempt should be made to develop a standardized faculty evaluative instrument.

It is recommended:

1. that each institution utilize an objective evaluative instrument, on a periodic basis, to determine faculty effectiveness;
2. that in the development of this instrument faculty and administrators reach a consensus in regard to the criteria to be employed;
3. that students' evaluations of instructors in terms of the instructors' effect upon them should be a part of the criteria; and
4. that the evaluations should be used in conjunction with other criteria to determine merit increases, promotions, and tenure.

Recruitment

Although recruiting qualified faculty members presents problems, the supply, with a few specialized exceptions, is gradually meeting the demand. College and university administrators report that, generally, they do not encounter the same difficulties in recruiting as they did five or ten years ago. There are more prospective faculty members with terminal degrees seeking employment than ever before.

The number of additional FTE faculty required by the public colleges and universities for the coming decade can be estimated by assuming the overall faculty-student ratio will not change and basing the estimate solely on

projected enrollment increases.

Using the estimated headcount enrollments found in Chapter II, Table V, and applying headcount/FTE indices established by the Commission staff, the projected number of FTE students in South Carolina public institutions will increase from 30,360 at present to 42,250 in 1975 and 43,900 by 1980 excluding the Medical University and the universities' branches and centers. This indicates that the estimated student population will increase by 39.2% in 1975 and by 44.6% in 1980, compared to 1970.

If the faculty-student ratio for the state remains constant, the numbers of faculty would increase by the same percentage. This means that 766 new FTE faculty positions will be created by 1975, but only 105 more between 1975 and 1980.

Listed below are the Fall 1970 faculty-student ratios for each of the state-supported institutions.

<u>Institution</u>	<u>Faculty-Student Ratio</u>
Clemson (Main Campus)	1:13.1
College of Charleston	1:15.1
Francis Marion	1:20.8
S. C. State	1:14.7
The Citadel	1:16.1
USC (Main Campus)	1:16.4
Winthrop	1:18.7
Average for all Institutions	1:15.5

While it is recognized that these ratios will undoubtedly change, assuming that they remain constant for the next 10 years, the table below gives the number of new FTE teaching faculty members needed for each institution.

South Carolina Public College and University
FTE Teaching Faculty

<u>Institution</u>	<u>1970 (Actual)</u>	<u>1975</u>	<u>Increase over 1970</u>	<u>1980</u>	<u>Increase over 1975</u>
Clemson (main)	593	741	+148	759	+18
College of Charleston	53	164	+111	283	+119
Francis Marion	37	103	+66	111	+8
S.C. State	133	173	+40	166	-7
The Citadel	158	192	+34	175	-17
USC (main)	790	1,019	+229	995	-24
Winthrop	<u>190</u>	<u>296</u>	<u>+106</u>	<u>308</u>	<u>+12</u>
TOTAL	1,954	2,688	+734	2,797	+109

(It is interesting to note that the institutional projections included in Statement of Goals and the above projections for new faculty are very close.) Three institutions--The Citadel, South Carolina State, and USC--show a decrease by 1980 and only the College of Charleston will have any substantial increase in 1980, reflecting the enrollment projections of Chapter II.

Even with more prospective faculty members, problems do exist in recruiting. Some of the handicaps faced by South Carolina public institutions in attempting to recruit the best qualified faculty members include 1) comparatively low entering salaries; 2) a policy that requires a faculty member to participate in the state retirement system; and 3) lack of fringe benefits such as increased insurance benefits with the state paying part of the premium.

There has been and always will be salary difficulties in certain academic areas in which demand exceeds supply. This parallels the situation in industries in which the scarcity of a certain qualified individual gives him more financial leverage. The salaries of faculty members for all South Carolina public institutions are discussed in detail in Chapter IV. The problems of retirement and insurance programs are discussed subsequently.

It was reported that the best contact in recruiting faculty members was generally on a personal basis at professional meetings. Some institutions,

particularly the Medical University, use the services of the United States Employment Agency.

It is recommended that each public institution, through the joint efforts of administration and faculty, develop policies and procedures designed to assist recruitment of qualified faculty.

Academic Advising

In reviewing the area of counselling by faculty members, all public institutions in South Carolina have some form of academic counselling ranging from simple assistance in scheduling to periodic meetings with special assistance to students. The extent of involvement of the faculty and procedures vary widely. Generally, faculty members involved do not have a reduced teaching load but may be relieved of some non-teaching duties. In most cases academic counsellors are alert to the need for psychological counselling but the two services are not related in a formal referral system. All institutions which have summer orientation programs point to their worth in counselling freshmen. In sum, each institution designs its counselling program to meet its own needs and capabilities although it appears that some additional attention in this area may be warranted.

It is recommended that there be increased emphasis on academic advising of students at all institutions and the faculty accept academic advising as a part of their assignment. The services of psychologists and psychiatrists should be made available to all students where warranted.

Fringe Benefits

Fringe benefits for faculty members are predictably and rapidly assuming a major position in the system. This is especially true of those institutions

in which the administration is aware of the value of these benefits in a competitive situation, and in which there is organizational flexibility to allow for full advantage to be taken.

No longer are these benefits considered a luxury to be bestowed upon the few but, as educational institutions and other agencies have indicated, they represent an interest in, and response to, faculty needs. Fringe benefits at any institution must of necessity act to aid faculty recruitment and help hold those presently on staff. Sometimes, however, they become a deterrent, due to their inequities with other comparable institutions.

Presently the benefits available to a faculty member at a public institution are:

1. a state-sponsored retirement system;
2. a term life insurance policy, paid for by the state, and equal to one year's present salary after one year of service to the state;
3. travel allowance, when conducting institutional business, in the amount of \$18.50 per day for out-of-state travel (\$21.00 for travel to cities with population of 250,000 or greater) and \$15.00 per day when conducting business within the state;
4. moving expenses, if deemed necessary, in an amount that varies from institution to institution;
5. basic hospital, surgical, medical, and major medical programs, purchased on a group basis at each institution by the individual faculty member, offering the faculty member a varied program and differing in coverage from institution to institution;
6. short- and long-term disability programs, purchased on group basis by each institution wishing to do so. These programs vary in scope and cost between the institutions offering such programs and are purchased by the individual faculty member;

7. group life and disability insurance and a cooperative credit union offered by the South Carolina State Employees' Association; and
8. a tax sheltered annuity program, fixed and variable, offered on an individual institution basis, to those faculty members interested in such a program.

None of the last four is a true benefit to the individual faculty member derived from a specific state-sponsored program. Programs purchased by a group and paid for entirely by the individual can be obtained within or outside the framework of an institution, if sufficient faculty members desire such a program.

Retirement Program

The State Retirement System, established in 1945, has been amended several times to include out-of-state service, interest, death benefits, and a reduction in the number of years required for eligibility in a deferred annuity program. This entire program, however, is designed solely for retirement, and to act as an inducement for faculty members to become career employees.

Established faculty members find that rarely does the retirement system qualify for out-of-state service credit, and a departure means a sudden halt in the growth of their present retirement program. Younger faculty members, noting the length of time it takes even to qualify for a deferred annuity, find nothing holding them to their present positions; to them, moving out of the South Carolina Retirement System is no loss.

Features of the South Carolina Retirement System which are particularly unattractive to a faculty member include the following:

1. the absence of a provision whereby a faculty member is vested in all his contributions and all the interest upon entering the system;
2. the absence of a provision whereby he has a vested interest in the state's contribution;

3. the absence of a right to withdraw all contributions plus the interest, once service with the state institution has been terminated; and
4. the absence of a provision whereby, at retirement, contributions and interest may be withdrawn in one lump sum, plus the other standard options.

It is recommended that legislation be enacted which would offer faculty members at public colleges and universities the option of participating in the Teachers' Insurance Annuity Association-College Retirement Equity Fund (TIAA-CREF) or the South Carolina Retirement Program with the proviso that the cost to the state shall not exceed that of participation in the state program.

Major Medical Program, Disability Income Protection
and Travel Insurance

The three forms of insurance in this category are usually offered by most companies in the health insurance field. At the present time each institution purchases the program desired from the company it selects. The coverage, therefore, is not uniform from institution to institution and the costs are not the same. Since the employee must pay the full premium cost, it is really not a true fringe benefit.

It is, therefore, recommended that the State Personnel Division prepare a uniform package program, covering these three types of insurance, and that the state pay some portion of the premium cost for this coverage for all full-time faculty members.

By purchasing the program statewide, the number of persons involved in the program would be greatly increased and therefore the individual premium costs should be reduced. This coupled with a competitive bid program should further reduce the state's obligation, if it were to pay for the entire program.

Outside Work and Political Activity

Most South Carolina public institutions permit outside work by faculty members under quite similar policies. It is the consensus that each full-time faculty member should accept his appointment with the understanding that his primary responsibility is to the employing institution. It was also recognized that often private circumstances dictate that a faculty member take outside employment and that sometimes such employment is beneficial to the school as well as to the individual. It is recommended that all public institutions prepare written guidelines on political activity and outside work and that applicants for faculty positions be provided these guidelines.

Faculty and Governance

The role of the faculty in the educational process requires that faculty be involved with the policies and operation of institutions of higher education. Faculty members are competent in dealing with many areas of college administration and policy, they are certainly affected by these policies; and they could contribute greatly to the overall strength and stability of institutional governance.

The role of faculties in governance should include active participation in educational policies, organizational mechanisms, faculty personnel policies, financial affairs, capital improvements, student affairs and public and alumni relations. In general, the faculty as a body, or individual faculty members, are capable of important contributions to the central purpose of a college or university which is the translation of the talents and capacities of its faculty into significant educational objectives.

The South Carolina public college and university faculties in general have influence in the establishment of teaching load policy, in new faculty appointments, and in departmental budget considerations. Senior faculty often influence

promotions and awarding of tenure. Almost without exception the faculties are not represented as voting members of boards of trustees, in college or university-wide budget preparation, nor in long-range facility planning to include establishing of priorities. Faculties are substantially represented on committees but the preponderance of such committees' efforts is advisory rather than legislative.

In sum, the practice in South Carolina is to relieve the faculties of the burdens of decision making and the concomitant responsibilities and to reserve the decision making to the element which is ultimately responsible--the administration.

It is recommended that: (1) the faculty of a department should be actively involved in determining budget recommendations of that department; (2) the faculty should have the opportunity to recommend persons for the position of academic dean, department heads, and presidents, and; (3) all institutions permit representatives from the faculty (and from the student body) to attend meetings of boards of trustees.

Tenure and Promotion

Tenure is a means of guaranteeing to the experienced faculty member continuity in his teaching position, and it exists for the purpose of assuring to the faculty: (1) freedom of teaching and research and of extramural activities and (2) a sufficient degree of economic security to make the profession attractive to men and women of ability. Freedom and economic security, hence, tenure, are indispensable to the success of an institution in fulfilling its obligations to its students and to society.*

* Statement of Principles on Academic Freedom and Tenure (American Association of University Professors and Association of American Colleges, 1940).

There is general agreement among the South Carolina public colleges and universities that recommendations for the award of tenure be initiated at the department level. Faculty recommendations should include considerations by peers and supervisors in the department and should be endorsed by the department head, dean of the school or college, and the vice-president for academic affairs. The president should have final authority.

Tenure should not provide a haven for the indolent or the incompetent, and the institution, when establishing tenure policies and procedures, should provide for the withdrawal of tenure for such persons.

Recommendations for promotion follow the same channels as tenure, beginning with faculty participation and ending at no level lower than the vice-president for academic affairs. The level of decision varies depending on the organizational structure of the institution but is normally made either by the president or by the academic vice-president.

It is recommended that each institution develop written policies on tenure and promotion and make these policies known to all parties concerned and that these be re-examined periodically.

CHAPTER VII

STUDENT AID

The Need for Student Financial Assistance

The fact that South Carolinians do not attend college in the numbers that would be expected using national or even regional norms is a matter of common knowledge, and is well documented. From 1960 through 1969, the fraction of South Carolina high school graduates enrolling as degree candidates each year in colleges or universities remained relatively static, from 31% in 1960 to 33% in 1968 and again in 1969. On the national scene, this decade saw an increase in similar enrollments from 50% in 1960 to 60% in 1969.

Among the reasons that have been advanced for this showing--including inadequate secondary school preparation, lack of motivation, lack of peer or of parental interest--the financial barrier standing between able South Carolina citizens and higher education is paramount. Per-capita income in this state remains well below national or even regional norms, but the cost of going to college in South Carolina is not correspondingly lower. Indeed Warren Willingham⁽¹⁾ has pointed out that the state's seeming shortage of "free access" colleges is due not so much to a shortage of available and accessible campuses but to the fact that tuition and fees charged at even the public institutions exceeded the arbitrary standard of \$400 per year. With the exception of the Medical University of South Carolina, the point made by Willingham is valid.

The Carnegie Commission on Higher Education in a recent report⁽²⁾ has recommended that states in which college enrollments comprise less than 30% of the population 18 through 21 years old should take "emergency measures" to increase the availability of higher education in the state. Such states include South Carolina (and, as of 1968, only four others: Georgia, Virginia, Nevada, and Alaska).

The Commission surveyed existing financial aid at all in-state colleges and universities for 1967-68⁽³⁾ and again for 1969-70⁽⁴⁾. Both these surveys showed, for South Carolina citizens enrolled as undergraduates in all these institutions, aid of all forms available was insufficient. In 1967-68, \$7.6 million was awarded to these students, but this figure was \$8.5 million less than the total need, based on national norms. In 1969-70, aid awarded increased to \$12.6 million, but this figure was \$10.8 million short of real needs, using the same national norms. Increased costs of going to college accounts for the 27% increase in the current need figures between the two survey years, since the South Carolina undergraduate resident population increased by less than 15% over this same period.

These data are indicative of a need for additional student aid dollars in the state, but it must be remembered that both surveys measured the unmet needs of students already enrolled in college. No data exist on which to base an estimate of the numbers of South Carolinians who are barred from access to post-secondary education solely because of lack of money.

However, the Commission, in collaboration with the State Department of Education, conducted a survey in the spring of 1971 of all high school seniors in the state as to their plans for post-high school education⁽⁵⁾. More than 80% of South Carolina seniors responded to the survey. Of these who responded, 59% indicated definite plans to attend some form of post-secondary institution. Of all respondents, 38% indicated definite plans for college, in-state or out, and another 8% indicated plans to enroll in South Carolina's Technical Education system. Of those planning further education beyond the high school, more than half (57%) estimated that they would require some form of financial aid and a whopping 39% estimated this need would exceed \$600 each per year. More than 15% of the college-bound could be classified as "full-need", since they estimated financial need in excess of \$1400 each annually.

Even more to the point, 8% of the respondents in this survey indicated that they were either definitely not planning on or were uncertain about further education primarily because they did not have the necessary money or were uncertain about obtaining necessary aid. This means that more than 2600 South Carolina seniors this year will probably not go on to post-secondary training, because they lack the financial resources to do so.

The Commission adopts the objective of enhancing the state's role in ensuring that none of her citizens are denied access to post-secondary education solely for financial reasons.

To move toward this objective, the Commission proposes the five-point program discussed in the following paragraphs.

Aid to Sectarian Institutions

The Committee to Make a Study of the South Carolina Constitution of 1895 proposed a revision to delete constitutional prohibitions of "indirect" aid to institutions controlled in whole or in part by sectarian bodies. In Hartness vs. Patterson, March 10, 1971, the State Supreme Court held, in the case of the Tuition Grants Act of 1970, that state grants to students constituted indirect aid to institutions.

The Commission recommends prompt action to revise the Constitution to remove the prohibition against indirect aid to sectarian institutions as proposed by the Study Committee, in order that grants and other forms of state-assisted student aid may be initiated.

A program of student aid should focus on the needs of students, not those of institutions.

State-Funded Grant Program

The Commission recommends that a state-funded program of non-repayable grants to needy undergraduate students be established as soon as possible. Two recent studies have shown that grant aid is the most urgently needed form of aid now in this state.

Legislation establishing this program should:

1. define eligible students as those South Carolina residents enrolled in, or admitted to, an undergraduate program in any South Carolina post-secondary institution which is accredited by the Southern Association of Colleges and Schools;
2. authorize grants to individual students based on individual need at the college of choice, where need is defined as the difference between established college costs and each student's total financial resources, including all other forms of aid, all measured on a standardized scale;
3. limit the maximum amount of each grant to an individual to the lesser of
 - A. measured need in each case, or
 - B. required tuition and fees, exclusive of room and board, at the college of choice, or
 - C. one-half the average annual state subsidy per full-time equivalent student, for students similarly situated, in South Carolina public institutions for the latest year for which data are available; and
4. authorize the Commission on Higher Education to administer this program, and to request annual state appropriations for this purpose.

The requirement that these grants be based only on individual need distinguishes them from scholarships which require some measure of academic merit and may or may not require a demonstration of need. The judgment as to the academic merit for each student in this proposed program would rest where it

properly should--with the faculty of the college in question in each case.

The requirement for measurement of individual need at the college of choice ensures that the state grant would supplement rather than supplant existing forms of aid, and would act to help preserve freedom of individual choice.

The limitations on the maximum amount of each grant would act to deter unwarranted tuition increases in the private sector.

The requirement for the establishment of a central office to administer the proposed grants program seems necessary to ensure that the funds are distributed to students equitably on the basis of uniformly measured need in each case. The role of the campus-based student aid officer at each institution must remain central in each institution's own program of aid, and a central office for administration of this program can reinforce each aid officer's program.

The Commission believes that such grants are necessary if a higher proportion of South Carolina students are to take advantage of post-secondary opportunities otherwise available to them.

Experience in 20 other states now operating such programs, and the limitations suggested above, indicate that the average annual grant may be estimated now at about \$500 per student. The Commission recommends that the program be funded at an initial level sufficient to provide such aid for at least 5% of the high school graduating class annually. This at current levels and assuming normal attrition rates in college would require an annual funding level of \$3 million. Presuming that college-going rates will increase during the decade as estimated elsewhere in this report (Chapter II), the annual cost should increase commensurately to a level of about \$4.5 million, in 1971 dollars, by 1980.

Because it is believed that it is a proper function of the state to help see to it that none of her citizens are denied access to higher education solely

for financial reasons, it is suggested that the funds necessary to operate this program be provided annually by the General Assembly from the general revenue of the state.

It is further recommended that such a generally-available grants program supplant the existing Tuition Grants Program which is much more restrictive in scope.

The Guaranteed Student Loan Program

The Guaranteed Student Loan Program, begun here in 1966 in response to the Federal Higher Education Act of 1965, has operated as a tripartite effort on the part of private enterprise, the state and the federal governments to make loans available to needy students. Capital for the loans was provided from the private sector--the banks making the loans; the federal government providing interest subsidies and more recently a special allowance to lenders; and the state providing guaranteed reserves against death or default on the part of the borrowers.

Because the private sector has found the drain on its own resources heavy, revisions already under way would shift the capital requirements for such loans to the state level in the form of revenue bonds, which would be purchased by the private sector.

The Commission supports this revision in the belief that by this means a program of sufficient magnitude to meet the existing and projected needs may be made available. The Commission recommends to the Education Assistance Authority an annual lending level of at least \$2.5 million be provided. At current average borrowing levels, this would provide loans for about 7% of the college population in the state. The annual level should increase proportionately with this population, to about \$3.5 million by 1980.

Grants for Out-of-State Education

For at least 25 years, the state has provided a system of grants available to students electing to attend college out of state. Since 1958, this program has been operated by the local Board of Control of the Southern Regional Education Board, now a part of the Commission on Higher Education.

The grant program has operated by annual authorization of the appropriations acts. To meet the needs of the 70's in this area, it is recommended that separate legislation authorizing this program on a continuing basis be enacted.

Such legislation should:

1. charge the Commission on Higher Education with administration of the program; and with authority to establish rules and regulations for this purpose;
2. authorize annual appropriations to the Commission for this purpose;
3. define student eligibility, at least as to residence (presuming that the intent is to meet academic need not provided for in-state, no financial need criteria are suggested);
4. limit eligible curricula to those not currently offered by any junior or senior college or university, or Technical Education Center, in the state; but which are offered at some public institution elsewhere;
5. limit eligible institutions to those out of state not controlled in whole or in part by sectarian bodies; and
6. limit awards to any one individual per fiscal year to one-half the average state appropriation per FTE student for public institutions (excluding the Medical University) for the most recent year for which data are available, subject to the further limitation that no grant may exceed one-third the required tuition and fees for the academic term attended.

An example may help clarify the intent of this paragraph. Assume a student applies for such a grant to study in an eligible university for which the required

tuition and fees per semester are \$600 and for a full summer term are \$300; and that the average state appropriation in South Carolina per FTE student was \$1,300. According to the appropriation-per-student limit, the maximum for which the student would be eligible would be \$650. However, according to the tuition limit, the student would be eligible for but \$500, payable at \$200 per term for the academic year and \$100 for the summer term; and the lesser of the two limits would be applied.

Coordination of Aid Programs

The enactment of a state grants program, expanded programs of loan activity for students, and revision of grants for out-of-state study will mean an increasing commitment of state funds for student aid in its various forms. The Commission recognizes that the essential function which accompanies such increased state involvement in student aid is strict public accountability for those funds.

To coordinate these activities, and to provide that accountability, it is recommended that the administrative and the fiscal responsibility reside with the Commission, for all of these programs. It is an objective of the Commission to establish a Division of Student Affairs, to which responsibility for these several programs may be delegated.

References

1. Willingham, W. W., Free Access Higher Education, College Entrance Examination Board, New York, 1970.
2. The Capital and the Campus -- State Responsibility for Higher Education, Carnegie Commission on Higher Education, McGraw-Hill Book Company, New York, April, 1971.
3. Annual Report, 1970, South Carolina Commission on Higher Education, Columbia, South Carolina, 1970.
4. Annex F - Report of the Long-Range Planning Committee on Student Aid.
5. South Carolina Senior Survey, 1970-71, College Entrance Examination Board, 1971.

CHAPTER VIII

LIBRARIES

Introduction

A study of the libraries of the public and private institutions of higher education in South Carolina leads to the following general conclusions:

1. Physical facilities for library service must be rated as outstanding, with only a very few institutions having inadequate facilities and no plans for immediate improvement. Considering the institutions as a group, the task of constructing facilities has been accomplished and the state has an enviable collection of library buildings.
2. Library resources, with few exceptions, are alarmingly limited in quantity, and massive financial support for library resources will be required if the state is to improve its present low ranking in the region and the nation.
3. Library staffs are now adequate in number, but the future effectiveness of the libraries of the state's institutions of higher education depends on the upgrading of staffs through the addition of highly trained librarians.

The remainder of the Chapter is devoted to a detailed examination of the state-supported institutions of higher education, excluding the two-year centers and branches.

Physical Facilities

One of the most encouraging aspects of library service at the state-supported institutions is the excellent condition of the library facilities. All state-supported institutions have new library buildings, have buildings under construction, or (at the University of South Carolina) have funds for new buildings which will be under construction by the end of 1972. It is estimated that these actions will assure that each of the state-supported institutions will

have adequate buildings for at least 10 years.

Suggested space standards for libraries have been established by professional bodies, such as the Association of College and Research Libraries and the Southern Association of Colleges and Schools. These include:

1. maximum capacity of 15 volumes per square foot in stack space;
2. 25 - 30 square feet for each reader with seating to accommodate not less than 25% of the student body; and
3. an average of 125 square feet of office or workspace per full-time staff member.

Tables I, II, and III (pp. 159, 160, 161), show the situation in these three areas at the state-supported institutions. Considering the particular needs of each institution together with the new construction already funded, it is believed all institutions will meet the desired standards.

By 1975 library facilities at South Carolina public institutions of higher education will be excellent, with sufficient capacity to carry them to the next decade.

Financial Support

Guidelines which are widely used in evaluating the financial health of a library include the expenditure of funds for library use in ratio to size of the student body, the expenditure of funds for library services in ratio to the overall institutional budget, and the percentage of the library budget spent for books as compared to the percentage spent for library salaries. These guidelines are helpful in determining the relative importance of the library to the administrative structure of the institution, but should not be accepted without further analysis of individual cases. The percentage of the educational dollar spent for library purposes will probably vary among institutions since each is likely to present a special situation.

The Association of College and Research Libraries states that good library service "will normally require a minimum of five percent of the total educational and general budget" and further, that there should be a higher percentage "if the library holdings are seriously deficient or if there is a rapid expansion of student population or course offerings". Table IV, p.162, shows that of the state-supported institutions, in 1969-70 only two--University of South Carolina and Winthrop--reached this desired level and that one--the Medical University--fell seriously below it, although the amount spent per student at the Medical University was significantly higher than at any other state-supported institution.

A second criterion for measuring library support is the expenditure per student. A figure suggested by the ACRL is \$100 per student. Further, it is safe to assume that any library falling appreciably below the average support figure for the state would be receiving inadequate support. In 1969-70 the average of public and private institutions in the state was \$109; of the public alone, \$140, primarily due to a per student expenditure of \$313 of the Medical University.

Table V, p.163, shows that The Citadel and the College of Charleston fell well below the ACRL minimum and the state averages. These deficiencies are clear danger signals. The College of Charleston has recently become a state-supported institution which is expected to grow rapidly. In this situation, the amount spent for library service should surpass rather than fail to reach the state average. The Citadel is a member of the Charleston Consortium of Libraries and as such serves not only its own students but also the students of the College of Charleston and many of the students of the Baptist College. Therefore, the figure of support per capita for The Citadel is actually less than is shown since it serves a clientele at least half again as large as its own student body. Demands on The Citadel's library will be inordinately heavy

until the Baptist College and the College of Charleston have adequate collections to support their programs, and even then there will be some extra demand through the interlibrary cooperative arrangements of the Charleston Consortium.

The size of the budget alone is not sufficient to assure good library service; the numbers and quality of the personnel supported by the budget are equally important. One of the standards of the ACRL states that "while the allocation of library funds for specific purposes will depend on the needs of the individual institutions, experience shows that a good college library usually spends twice as much (or more) for salaries as it does for books". In 1969-70 only Winthrop and The Citadel came close to this criterion among the state-supported institutions, as shown by Table VI. Four institutions (Clemson, College of Charleston, Medical University, South Carolina State) actually spent less on salaries than they did for books, periodicals, etc. Such an imbalance generally indicates either too small a staff or too low salaries.

To summarize: the public institutions came nearer to 4% of institutional expenditures for library purposes rather than 5% although five institutions exceed the basic \$100 per student figure. The ratio of personnel versus book expenditures indicates that the academic libraries of South Carolina are generally understaffed and required to produce more for salary paid than is desirable. Succeeding sections of this Chapter will examine in greater detail library holdings and staffs.

No consideration of financial support for academic libraries in South Carolina can ignore the past or the future. Historically, it is a fact that collections were neglected, that staffs were in many instances under-trained and inadequate in numbers. Only in recent years have expenditures begun to approach national norms, but on the whole recent support has not been adequate to compensate for the under-funding of the past.

Planning for future academic library expenditures must take into consideration the continued inflationary spiral of the costs of books and periodicals as well as salaries for library personnel. According to the latest issue of Bowker Annual of Library and Book Trade Information, the average price of a book rose from \$5.29 to \$7.99 in the past 10 years or 35%, and the cost of periodicals rose from a cost of \$4.92 to \$9.31 during the same period or an increase of almost 100%. In some common subject fields, such as chemistry or physics, the increase is even greater. It is a conservative estimate that to maintain present levels of acquisitions, the acquisitions budget must be inflated by not less than 10 to 15% annually. Comparable increases can be expected in staff and supply budgets as well. In addition, since library service is directly related to the number of students enrolled, future growth of an institution must be reflected in library budgets.

Present expenditures for all public institutions for library operating budgets amounts to slightly more than \$3.5 million. It is recommended that the General Assembly enact special appropriations of \$1.5 million per year for the remainder of the decade for library purposes to cover all institutions to enable libraries in the South Carolina public institutions to begin to close the gap between their holdings and staff and those of comparable institutions in neighboring states. The need for this appropriation is urgent, and must be over and above the present level of support. In the following sections of this Chapter will be found specific needs for library materials and upgrading of library staffs which amply justify this recommendation and indicate the critical nature of the need.

Library Holdings

The Association of College and Research Libraries suggests that no library

can give effective support to the instructional program of a four-year college with 600 or fewer undergraduate students without a minimum collection of 50,000 well chosen volumes; the standard further stipulates that for each additional 200 students, an additional 10,000 volumes is required. It must be emphasized that this is a minimum standard. Table VII, p. 165, indicates that, of the five public colleges, only Winthrop meets this minimum standard. The weakness of library holdings overall can be seen when the total holdings of all public college and university libraries in South Carolina, 1,954,286 volumes, is compared to the holdings of Duke University Library, 2,132,000 volumes, or to the holdings of the University of North Carolina at Chapel Hill, 1,922,787 volumes.

This weakness is further emphasized when the number of volumes per full-time student, which does not exceed 82 volumes for any S. C. public institution (Table VII, p.165) is compared with Duke or U.N.C. In 1968, Duke reported 269 volumes per student, U.N.C., 104 volumes.

In evaluating library collections, total holdings are significant, but some analysis of strength in periodical and serial holdings is also needed. One generally accepted standard calls for a minimum subscription list of 1,000 periodical titles for a college library, with universities requiring many more, depending on their size and the number of graduate programs offered.

Table VIII, p. 166, shows that Winthrop exceeds 1,000 subscriptions but all the other public colleges are weak, with the College of Charleston dangerously low, with only 247 subscriptions. The University of South Carolina shows marked strength in this area, comparing quite favorably with published statistics of similar institutions in the region, but Clemson has a low number of periodical and serial holdings considering the extent of its graduate offerings and comparing it with other institutions of its type. The Medical University appears to be weak considering the scope of present and proposed programs.

Increasingly significant in evaluating academic libraries is the extent of holdings in microform (Table VIII) which includes all materials in micro-reproduction--microfilm, microcard, microprint, and microfiche. Of all library materials this is the least expensive to acquire and store. The University of South Carolina has one of the largest collections of microform in the nation. Francis Marion and the College of Charleston should rely heavily on microform purchases to bring their collections up to minimum standards.

The foregoing evaluation of holdings does not take into account several salient factors: the rapidly increasing enrollments in the public institutions, the expansion of existing academic programs, and addition of new programs. Because there is an overall shortage of library resources in public (and private) institutions in South Carolina, it is essential to project as a major goal for the 1970's a program at all institutions to build up and maintain adequate library resources for present and projected academic programs. With the inflationary cost of library materials, increasing financial support will be imperative merely to maintain the present unsatisfactory level of resources; massive additional allocations will be required to overcome the underfunding of the past. It is recommended that institutions ensure that financial support is available to procure library holdings in adequate numbers.

Government Documents

The official publications of the federal and state governments are prime resource material for teaching and academic research, and all public college and university libraries in South Carolina except that of the Medical University are depositories, either partial or full, for federal documents. This would indicate there are adequate efforts being made to secure and make available the publications of the federal government to students and faculty as well as to the general public.

There has not been an organized and coordinated effort in South Carolina to collect and preserve the publications of the state government. There is a critical and urgent need for a uniform plan which would establish policies of publication, distribution, and availability for the many publications coming annually from state agencies of government. It is recommended that South Carolina adopt a Documents Depository Law which will provide for the collection, listing, and distribution of state publications to designated depository libraries around the state.

Archives

The preservation of the official records and correspondence of officers and departments of institutions of higher learning is of tremendous importance for historical research. Among the public institutions, Clemson is the only institution with an established policy for the preservation of the official records of the University. Although other institutions have made some effort to preserve official records, none of them appear to have a total records management program. It is recommended that institutions develop formal policies and procedures for retaining written material of potential historical importance.

Personnel

One of the principal criteria in judging a library is the quality and size of its staff, for without a competent staff a library collection will fall short of its potential. Salaries are the largest single item in the budgets of leading college and university libraries.

Standards for college libraries adopted by the Association of College and Research Libraries in 1959 state that there should be a minimum of three professionals on a library's staff. As Table IX, p. 167, shows, all of the public

institutions meet this standard.

The ACRL standards offer no guidance as to the ratio that should exist between the number of professional staff members and the number of students served. If one accepts the Canadian standard of 1 to 300, only the Medical University, the College of Charleston, and South Carolina State College meet the standard, although the University of South Carolina and Winthrop are not far off.

In dealing with non-professional staff, the ACRL standards state only that the number should be "adequate", which is generally accepted to mean that there should be two non-professionals for each professional. Table IX shows that this ratio is met at Clemson, the University of South Carolina, Francis Marion and Winthrop. There is a wide variation in the use of student help. Part-time student assistants can be useful in a variety of routine positions, but they are almost never as efficient as regular employees and their use should not be allowed to inhibit the development of a competent non-professional staff. Some institutions appear to have allowed this to happen, as a study of Table IX will show. The use of part-time help (almost entirely students) varies widely, from none at The Citadel to 125,000 hours at the University of South Carolina.

It should be noted that trained library personnel are becoming available. Further, the establishment of a Graduate Library School at the University of South Carolina will significantly contribute to the upgrading of library personnel throughout the state, not only through formal academic programs but through the various service functions it is expected to fulfill. Given sufficient funding, there is no foreseeable problem in adequately staffing libraries.

If the institutions of higher education are to have adequate resources to serve their clientele, they must have funds not only for greatly enlarged collections, but also for the staffs to service them. It is recommended that institutions ensure that financial support is available to employ well trained

library personnel in adequate numbers at competitive salaries.

Use of Libraries

Data on the use of libraries as shown in Table X, p. , are in general agreement with statistics collected by the Office of Education and by the Association of College and Research Libraries. The data do not reflect all the use made of libraries, e.g., inbuilding use is not registered, and this may be as great in an open stack library as the use of books that are checked out for home use. Nevertheless, circulation statistics are the only quantitative measurement available and do give some indication of the extent to which a library's resources are used.

Home circulation exceeds reserve circulation at all institutions, and in most cases by a large margin. This could indicate that a relatively large amount of reading is done beyond that required for specific courses. However, the per capita circulation of books appears generally low. No public institution has a circulation exceeding 50 per full-time student, which is sometimes considered the mark between effective and ineffective use of a library collection. Many of the institutions report a distressingly low circulation of books, indicating that one of the chief educational resources available in South Carolina is widely neglected. This condition may be corrected by giving better instruction in the use of the library, maintaining a closer liaison between faculty and library staff, reporting library news in the student newspaper and other publications, encouraging faculty to motivate students to use library resources, and in a variety of other ways. The statistics in Table X indicate that more effective efforts to increase the use of the library are needed at all institutions. It is recommended that institutions stimulate greater use of the library resources of the public institutions.

Interlibrary loan statistics (Table XI, p.169) support the conclusion that South Carolina libraries lack resources since they must borrow more than they lend. The fact that the University of South Carolina, the most affluent of the state's libraries, borrows more than it lends is particularly significant. Only the Medical University and South Carolina State College lend more than they borrow.

Interlibrary Cooperation

Interlibrary cooperation is a concept which is frequently discussed, strongly desired, but not often practiced. On the national level, the finest example of cooperation is found in the National Interlibrary Loan Code, which provides for the lending and borrowing of library materials for the use of graduate students and faculty. All institutions of higher education in South Carolina, both public and private, benefit from this system.

Within the state, several noteworthy cooperative projects have been instituted or planned.

1. The College of Charleston and the Medical University

The technical processing department of the Medical University does the actual cataloging and processing of library materials for the College of Charleston, which handles the acquisition of the materials. The College of Charleston employs the staff and pays a part of the cost of card reproduction, with the Medical University providing supervision of the processing. In addition, the College of Charleston pays a portion of the salaries of the Director of Libraries and the Chief of Technical Processing at the Medical University. The Director of Libraries at the Medical University provides general administrative supervision of the College of Charleston Library, contributing primarily to planning, budgeting, and acquisition selection.

2. The Charleston Consortium of Libraries

The Baptist College of Charleston, The Citadel, College of Charleston, Medical University, Palmer College and Berkeley-Charleston-Dorchester Technical Education Center entered into a formal cooperative agreement to strengthen local academic library resources through the sharing of materials and service by members of the Consortium. The following regulations, which have been accepted by the cooperating institutions, indicate the nature and extent of this cooperative effort:

- A. Any faculty member or registered student, whether full- or part-time, at a member institution of the Charleston Consortium shall be entitled to use the library facilities of the other institutions, subject to the limitations set forth in these regulations.
- B. Periodicals will not be circulated under this agreement.
- C. Monographs will circulate according to the regulations of the lending institution.
- D. Fines as established by the lending institution for their own users will apply to the borrower regardless of his institutional affiliation.
- E. Materials not returned to the lending institution by 30 days after the due date will be considered lost and the borrowing institution will be billed at cost plus 10% for processing. Note: The individual will not be billed.⁷
- F. Reference service will be provided to students of the cooperating institutions at the discretion of the reference staff at the library of which the request is made.

3. The South Carolina State Library Interlibrary Teletype System (SCILTEL)

The South Carolina State Library has recently installed a teletype system to speed the handling of interlibrary loan requests and to foster coopera-

tion among the libraries of South Carolina. The program is designed to make wider use of library resources in the state. Participating in the project are the following libraries: the South Carolina State Library, the University of South Carolina libraries, the Charleston County Library, the Florence County Library, and the Greenville County Library, with the latter three designated Area Reference Resource Centers.

The Area Reference Resource Center libraries will be responsible for receiving and transmitting requests in their assigned geographical areas from county libraries, college libraries, and special libraries which are participating in the State Library's reciprocal interlibrary loan agreement. SCILTEL referrals for college libraries will be sent to the University of South Carolina. In handling these requests, the National Interlibrary Loan Code will obtain, so that generally the service will benefit only graduate students and faculty members. College and special libraries participating in the program will work out a reciprocal loan agreement.

4. The South Carolina State Library Microfilming Project

The South Carolina State Library has offered to microfilm the main catalog of the University of South Carolina libraries and Clemson University library, as well as the catalog of the State Library. Copies of the microfilm of these three library catalogs would be interchanged, under this proposal, to expedite interlibrary loan service. Loan of materials would conform to the provisions of the National Interlibrary Loan Code limiting the use of the material to graduate students and faculty members.

5. Interlibrary Loan Cooperation Among the State Colleges

The Interinstitutional Library Committee of State Colleges and Universities is exploring the possibility of interlibrary loans for advanced undergraduates

and honors students whereby the five state colleges (Winthrop, State College, The Citadel, Francis Marion College, and the College of Charleston) might be able to work out an interlibrary loan agreement to share their resources for the use of undergraduates. This cooperative venture is only in the formative stage.

6. Cooperation Among Private College Libraries

Working through the South Carolina Foundation of Independent Colleges, the libraries of the member institutions published in 1969 a Union List of Periodicals, including some expensive serials, and this publication is presently being updated. The Union List indicates specific holdings in various libraries. By mutual agreement any library in the cooperating group may request photocopies at 10 cents per page for periodical material held by any member library. This exchange of material is not limited as to user and thus makes available the resources of these libraries to undergraduate students as well as faculty members and graduate students. (An excellent report on the situation in the private college libraries is contained in Annex G -- Report of the Long-Range Planning Committee on Libraries.)

From the foregoing summary, it is seen that significant efforts are being made to utilize more fully library resources on a statewide basis. However, for the most part, this sharing of resources is aimed primarily toward meeting research needs. It is recommended that institutions increase interlibrary cooperation and expand the categories of personnel benefitting from such cooperation.

TABLE I
Volumes Held and Maximum Capacity for Books
June 30, 1970

<u>Institution</u>	<u>Volumes Held</u>	<u>Square Ft. For Books</u>	<u>Maximum Capacity 1./</u>
Clemson -			
Earle Hall	294	160	2,400
Robert Muldrow	408,533	34,415	516,225
Sirrine Hall	3,995	200	3,000
Brackett Hall	3,096	350	5,250
Kinard Hall	2,472	432	6,480
Lee Hall	8,690	400	6,000
College of Charleston	38,287	2,500	37,000
Francis Marion	17,609	13,124	196,860
Medical University	67,247	21,000	315,000
South Carolina State	104,012	8,740	131,100
The Citadel	123,028	17,500	262,500
University of South Carolina -			
McKissick	601,977	20,000	300,000
Undergraduate	53,056	10,000	150,000
Science	55,640	7,000	105,000
Education	32,387	1,350	20,250
South Caroliniana	50,708 <u>2./</u>	8,251	123,765
Law	63,416	3,676	55,140
Music	<u>3./</u>	-	-
Winthrop	<u>180,724</u> <u>4./</u>	34,418	516,270
Total	<u>1,815,171</u>		
University Branches and Centers	<u>139,115</u>		
Total, all public institutions	<u>1,954,286</u>		

1./ At 15 volumes per square foot.

2./ Does not include 1,600,000 manuscripts.

3./ Total included in McKissick.

4./ Does not include 89,536 U. S. Government Documents.

TABLE II
Available Reader Space
1970-71

<u>Institution</u>	<u>Available Reader Seating Space in Square Feet</u>	<u>Capacity Number of Persons 1./</u>
Clemson -		
Earle Hall	620	25
Robert Muldrow	47,751	1,910
Sirrine Hall	1,080	43
Brackett Hall	618	25
Kinard Hall	620	25
Lee Hall	1,516	61
College of Charleston	2,500	100
Francis Marion	10,424	417
Medical University	8,500	340
South Carolina State	11,170	447
The Citadel	21,000	642 <u>2./</u>
University of South Carolina -		
McKissick	15,000	600
Undergraduate	15,000	600
Science	4,000	160
Education	2,390	96
South Caroliniana	4,196	168
Law	3,968	159
Music	1,600	64
Winthrop	14,842	594

1./ At 25 square feet per person.

2./ The Citadel requires 35 square feet per person.

TABLE III

**Full-Time Library Staff and Work Space Per Staff Member
1970-71**

<u>Institution</u>	<u>Full-Time Staff 1./</u>	<u>Total Sq. Ft. Staff Space</u>	<u>Av. Sq. Ft. Per Staff Member 2./</u>
Clemson -			
Earle Hall	0	0	0
Robert Muldrow	51	6,320	124
Sirrine Hall	0	310	310
Brackett Hall	0	0	0
Kinard Hall	0	0	0
Lee Hall	2	260	130
College of Charleston	6	760	127
Francis Marion	11	3,632	330
Medical University	21.5	4,225	197
South Carolina State	11	2,078	189
The Citadel	13.5	2,400	178
University of South Carolina -			
McKissick	86	4,000	47
Undergraduate	8	1,000	125
Science	5	600	120
Education	3	150	50
South Caroliniana	10	1,550	155
Law	3	1,125	375
Music	1	250	250
Winthrop	30	8,242	275

1./ Does not include equivalents for part-time employees.

2./ At 125 square feet per full-time staff member.

TABLE IV
Total Expenditures and Percent For Libraries
1969-70

Institution	Total Library Expenditures	Total Institutional Expenditures 1./	Per Cent For Library
Clemson	699,671	14,326,129	4.8%
College of Charleston	43,637	960,603	4.5%
Francis Marion <u>2./</u>	-	-	-
Medical University	256,233	9,109,045	2.8%
South Carolina State	192,176	4,198,597	4.6%
The Citadel	188,103	4,737,403	4.0%
University of South Carolina	1,830,179	25,966,316	6.9%
Winthrop College	411,311	4,927,969	8.3%

1./ Educational and General.

2./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

TABLE V
Per Student Expenditures For Libraries
1969-70

<u>Institution</u>	<u>Enrollment (Full-Time) 1969-70</u>	<u>Total Library Expenditures</u>	<u>Per Student Expenditure</u>
Clemson	6,355	\$ 699,671	\$110
College of Charleston	497	43,637	88
Francis Marion <u>1./</u>	-	-	-
Medical University	817	255,840	313
South Carolina State	1,733	192,176	111
The Citadel	2,157	188,103	87
University of South Carolina	13,241	1,830,279	138
Winthrop College	3,158	411,311	130

1./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

TABLE VI
Library Expenditures
1969-70

<u>Institution</u>	<u>Salaries and Wages</u>	<u>Books, Periodicals, Binding and Other</u>	<u>Supplies Travel & General</u>
Clemson	\$312,572	\$333,402	\$53,697
College of Charleston	19,697	21,686	2,272
Francis Marion <u>1./</u>	-	-	-
Medical University	115,576	118,705	21,563
South Carolina State	83,412	91,235	17,529
The Citadel	112,189	49,874	26,040
University of South Carolina	885,539	852,708	92,032
Winthrop	221,255	156,700	33,356

1./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

TABLE VII
Holdings Compared With Association
of College and Research Libraries' Standards
1969-70

<u>Institution</u>	<u>Enrollment</u> (Full-Time) 1969-70	<u>No. of Volumes</u> June 30, 1970	<u>ACRL 1./</u> <u>Standard</u>	<u>Deficiency</u>	<u>No. of</u> <u>Vol. Per</u> <u>Full-Time</u> <u>Student</u>
Clemson	6,127	427,080	<u>2./</u>	-	70
College of Charleston	497	38,287	50,000	11,713	77
Francis Marion <u>3./</u>	-	17,609	-	-	-
Medical University	817	67,247	<u>2./</u>	-	82
South Carolina State	1,733	104,012	110,000	5,988	60
The Citadel	2,157	123,028	130,000	6,972	57
University of South Carolina	13,241	857,184	<u>2./</u>	-	65
Winthrop	3,158	<u>180,724</u>	180,000	-0-	57
Total		1,815,171			

1./ ACRL Standard
50,000 minimum for up to 600 students
10,000 for each additional 200 students

2./ ACRL standards are intended for four year institutions with no or limited master's programs and are not applicable to universities.

3./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

TABLE VIII
Periodical, Serial, and Microform Holdings
1970-71

<u>Institution</u>	<u>Periodical and Serial 1970-71</u>	<u>Microform June 30, 1970</u>
Clemson	7,874	75,372
College of Charleston	247	577
Francis Marion	447	525
Medical University	1,724	875
South Carolina State	749	5,381
The Citadel	742	6,501
University of South Carolina	17,327	626,692
Winthrop	2,510	96,546

TABLE IX
Library Personnel
1970-71

<u>Institution</u>	No. of Full-Time Professional	No. of Full-Time Clerical and Sub-Prof.	No. of Hrs. Part-Time 1./
Clemson	16	37	4,800
College of Charleston	3	3	2,633
Francis Marion	3	8	8,064
Medical University	8	13.5	5,000
South Carolina State	7	4	17,627
The Citadel	5	8.5	-0-
University of South Carolina	42	90	125,000
Winthrop	10	20	22,702

1./ Annually

TABLE X
Library Circulation
1969-70

Institution	Home Circulation	Reserve Circulation	Total	Per Capita Circulation (Fac. & Student)	
Clemson	115,812	23,866	139,678	20	14.6
College of Charleston	5,817	99	5,920	33.3	7.4
Francis Marion	N/A	N/A	N/A	N/A	
Medical University	22,967	2,000	24,967	40	20
South Carolina State	41,726	4,258	45,984	4.8	22.3
The Citadel	44,759	-	44,759	16	22
University of South Carolina	277,120	59,751	336,871	24	<u>2./</u>
Winthrop	67,779	5,398	73,177	5	11

1./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

2./ Not available by student and faculty.

TABLE XI
Interlibrary Loans
1969-70

<u>Institution</u>	No. of Items Loaned	No. of Items Borrowed
Clemson	503	1,408
College of Charleston	11	28
Francis Marion <u>1./</u>	-	-
Medical University	904	678
South Carolina State	120	107
The Citadel	87	190
University of South Carolina	2,257	2,506
Winthrop	95	523

1./ Francis Marion existed as the Florence Branch, U.S.C. at this time.

CHAPTER IX
CONTINUING EDUCATION AND PUBLIC SERVICES

Introduction

There is no "terminal" education in today's world. The phenomenal growth of knowledge, and the vast social, economic, and technological changes in society require increasing numbers of people to continue their educational development, regardless of the level of their prior education. People must now seek activities that will help them to acquire new knowledge and understanding, and to develop new attitudes, values, and skills needed to cope with changing society. Higher living standards and more leisure time make it easier for people to develop their abilities and interests, either for profit or for personal satisfaction. Government, be it local, state, or national, has an obligation to provide continuing education opportunities which are responsive to the diverse needs of the citizenry. The different programs should prepare individuals for employment, upgrade the skills of the employed, retrain the technologically displaced, foster higher levels of educational attainment, and provide opportunities for cultural and avocational enrichment. The variety of programs is limited only by imagination.

Higher education also has an obligation to provide public services. The academic community can not remain cloistered in "ivory towers"; it must provide more than puristic knowledge in restricted disciplines. Collegiate institutions have a responsibility to carry on applied research, offer technical assistance, furnish appropriate facilities, and encourage community involvement in activities and attendance at lectures, concerts, and other appropriate convocations or performances. In short, the higher educational establishment must serve all of society in ways both pragmatic and aesthetic.

The Scope of Continuing Education

Continuing Education can have a profound effect upon the entire population of South Carolina, many of whom will otherwise continue to look at higher education as an unattainable abstraction for the financially and intellectually elite. Any adult who can benefit from a specified continuing education program should be given the opportunity to participate. Admission to a non-credit course should depend solely upon whether the individual feels he can profit from the course. Appropriate admissions standards should be met by students enrolling for college credit. These standards should be administered flexibly and should recognize identifiable prior knowledge, no matter what its source may be.

All of the institutions in South Carolina should offer programs of continuing education in those areas of learning where they have expertise or unique competencies. The geographic area to be served by a particular institution should depend upon its sphere of influence. The sphere of influence may be a city, a county, a group of counties, or the entire state, depending upon the discipline being offered, and the type of institution concerned. The sphere of influence may not remain static, since it will reflect the changing needs of the times and the people.

It is recognized that areas of conflict and overlapping interests invariably develop. With this in mind, it is an objective of the Commission on Higher Education to set up a procedure whereby the extension divisions of colleges and universities confine their general education offerings to specific geographical areas. Broader geographical areas will be determined for the offering of specialized courses which are available only at certain higher educational institutions.

A Long-Range Objective

As the decade progresses, more should be done to build maximum flexibility of opportunity for college work in South Carolina through a statewide program which eliminates residency requirements and recognizes industrial experience, travel, independent study, and other atypical methods of acquiring knowledge similar to that found in colleges. Such programs as Britain's "Open University", Wisconsin's "Open School", and New York's "External Degree Program" and "Empire State College" are developing rapidly to answer the need for non-residential, flexible learning. These programs use combinations of extension courses, independent study, educational television courses, proficiency examinations and the like to award credit for degrees which are usually granted by a state-supported commuter college.

The Committee on Continuing Education recognizes the eventual need for such a program in this state, and included as an appendix to its report a proposal entitled "The People's College: A Continuing Education System for South Carolina" (See Volume II, Annex I). While the Commission does not agree with all aspects of that appendix, it does set as a long-range objective the formal organization of a state-level, degree-granting program similar to the People's College concept which has been developed by the Committee on Continuing Education. The objective to create an Open University or People's College is admittedly an ambitious one. Many areas of continuing and extension education must be examined and appropriate intermediate steps must be taken within those areas to bring about the successful evolution of such a program.

A System for Coordination

Both the Committee on Continuing Education (See Volume II, Annex I) and the Committee on Educational Television (See Volume II, Annex J) identify a

real need for state-level coordination of their respective areas. It is an objective to add to the Commission staff a full-time member to coordinate continuing education. This staff member should stimulate the development of innovative and meaningful learning experiences which will bring higher educational opportunities to the entire population in a phased effort leading towards an "Open University" concept.

The Commission also plans to appoint standing advisory committees comprised of representatives of the institutions of higher education and other appropriate agencies to assist in efforts to develop better interinstitutional and inter-agency cooperation and to plan a more expansive statewide program. Such committees are obviously needed in the areas of continuing education and educational television; subcommittees may well be appropriate to support these committees in subject matter areas.

Educational Television

South Carolina has an outstanding educational television network which has been used on a closed circuit basis to offer a MBA program, an "APOGEE" program for master's degree work in engineering, and several programs in the areas of health and education. Nevertheless, it is quite obvious that these programs are reaching a very limited number of people, and the potential of the educational television system to meet the higher educational needs of masses of people is badly underutilized.

The Commission recommends that immediate priority be given to the development of pilot programs to provide, via ETV, credit courses which are needed by the teachers of this state to maintain certification. The pragmatic demands of the present require that emphasis be focused on the deliberate solution of an obvious need in an area where there is demonstrated demand. The Commission

further recommends concurrent development of a broadcast (open circuit) pilot program to ascertain the interest in and demand for freshman and sophomore level credit courses offered via ETV.

These pilot programs should be used as elements of studies, and appropriate criteria to measure success and demand should be determined prior to the presentation of the courses. Studies are more useful when they combine sensible experimental action with talk; pilot programs should not be unduly delayed by the need to develop courses. Specifically, South Carolina public higher educational institutions are urged to cooperate with the Educational Television Commission in identifying, selecting, and offering credit for outstanding courses which presently exist in other parts of the nation. Such a procedure should minimize time and cost, and should also eliminate most concerns about academic character, content, and accreditation since credit would presumably already be offered by accredited, higher educational institutions in the states of origin. Finally, it is urged that the courses selected for broadcast and evaluation make maximum use of the medium, since it would appear that the simple televising of classroom-teacher-blackboard presentations wears thin extremely quickly. Should the pilot programs prove successful, appropriate subject areas where good materials are not available should be selected, and committees should be formed to produce meaningful materials in South Carolina.

As mentioned in the previous section, the Commission plans to activate a permanent committee to assist in the above developments. It is felt that this committee should also look into the possibility of offering freshman level college courses in the high schools via ETV. This might provide an economical method of obtaining advanced placement for high school seniors, particularly in those high schools where there would not be sufficient registration to support local advanced placement classes. Other areas which warrant examination include

the development of non-credit courses for avocational enrichment and industrial training, and the use of electronic devices for planned independent study in learning centers or at home. There have been many significant advances in the design of inexpensive audio and audiovisual cassettes containing pre-packaged instructional materials for this purpose.

Independent Study Courses and Proficiency Examinations

If South Carolina has as its eventual goal the creation of a state-level degree-granting Open University, it would seem fairly obvious that there is a need to develop state-level independent study courses and probably need state-level proficiency examinations as well. Such programs will require statewide institutional acceptance. Therefore, it is an objective of the Commission to involve South Carolina higher educational institutions as participants in the development and implementation of these programs. It is hoped that all public institutions can work together to develop and accept a unified set of objectives, materials, and evaluative instruments for certain basic courses which would then be available for home study. Students might register, receive tutorial assistance, and take standardized examinations through the Division of Continuing Education at the nearest public higher education institution, but except for these procedures, their presence would not be required and they would be able to study at their own convenience.

State proficiency examinations could also be administered directly by local institutions at specified testing centers on specified dates. It might, however, be preferable to allow institutions to arrange their own testing centers and dates to make test application and administration procedures more flexible. Whenever possible, state-level programs should have maximum local participation in design and administration, and a portion of the income from fees should revert to the supporting local institution.

Innovative Curricula

As part of its effort to create an exciting, flexible, and viable continuing education program, the Commission will encourage higher educational institutions to develop their own innovative programs. The University of South Carolina has already become a participant in the University Without Walls program, which was announced in January of 1971 by the U.S. Office of Education. U.S.C. has also organized its own Contemporary University, a program which awards credit for meaningful but non-traditional educational experiences. Efforts are currently in progress to determine the interest of South Carolina universities in the development of bachelor of technology programs, which would enable outstanding graduates of two-year programs in technical education centers to continue their education without loss of credit. There has been discussion of the development of a bachelor of general studies degree at the University of South Carolina. Such a degree might allow adults to build more flexible programs based upon their interest or the needs of their current employment. Enthusiasm for the development of new curricula should not be seen as a demand for the lowering of standards. Rather, it is an effort to recognize the diverse needs of a heterogeneous society, which can best be served by the development of new patterns rather than the dilution of proven programs. Traditional programs need to be re-evaluated and redesigned, but their focus should not be drastically altered or weakened.

Transfer of Credit

South Carolina higher educational institutions need to liberalize their attitudes on transfer of credit. A strong continuing education program is highly dependent on the recognition of appropriate knowledge, whatever its source may be. If the content of a course has value at the college level, it

should at least receive elective credit. Even within one institution, equivalency between sections of the same course can only be approximate. There is generally too much emphasis on the exact similarity of courses for inter-institutional transfer. If the transfer student has sufficient knowledge to proceed forward in a program, he should not be required to step backward on the basis of a technicality.

The Commission also urges all institutions to review their policies on acceptance of credits from USAFI, CLEP, CEEB Advanced Placement Examinations, and other common non-traditional programs, many of which have now undergone extensive evaluation procedures and have demonstrated a high level of success.

Funding

At the institutional level, much work can be done in continuing education without heavy additional funding if people are dedicated to the task and if funds produced by popular programs are not diverted to support the regular full-time program of the institution. On the state level, the Commission will request additional funding for staff and seed money to carry out the above objectives.

The Scope of Public Services

Public services, which are sometimes included in the definition of continuing education, can be defined as the educational, cultural, social, and recreational services which an institution provides for the state or community beyond the regular credit courses scheduled on campus during the day or evening hours.⁽¹⁾ Such activities range from the statewide agricultural extension service to the college-sponsored community lecture series. Research on local problems such as pollution or drug abuse can be considered as public service, as can a simple offer of facilities to community clubs, organizations, and

agencies. Much is already being done by South Carolina higher educational institutions in the area of public services, but the potential is almost unlimited. Every institution can and should provide maximum public service to the community and, when possible, the state. Such efforts pay off by making education more "relevant" to the citizenry, and the institution a welcome addition to the community.

Support for Public Services

The Commission on Higher Education will recognize outstanding public service programs by formally citing their accomplishments, and will look favorably upon community involvement on the campus. Space utilization studies will take into account public usage, and community support for the college program will be noted. It is an objective of the Commission on Higher Education to encourage the participation of colleges and universities in public service activities.

Reference

(1) Definition adapted from definition of "Community Services" in Forum, Volume 1, No. 11 (Washington, American Association of Junior Colleges, 1969), p. 1.

CHAPTER X

TWO-YEAR POST-HIGH SCHOOL EDUCATION

Introduction

The question of how South Carolina can best provide post-secondary two-year education to her high school graduates has been the subject of sporadic debate over the last decade. During this time, two different kinds of systems for public two-year post-high school education have evolved. One type, the University Branches and Centers, consists of regional campuses of the University of South Carolina and of Clemson University, which offer primarily college parallel programs, although a few occupational programs are available. The other system, which began in 1961, now includes 13 technical education centers, three regional technical education centers (the former Area Trade Schools), a regional manpower center, a number of skill development centers, concentrated employment program centers, and temporary special schools for industries, all operating under the administration of the State Committee for Technical Education. The thirteen technical education centers provide a rich variety of post-high school programs in occupational and technical fields, up through and including the associate degree, as well as many occupational training programs of shorter duration.

The University Branches and Centers

The first public two-year University Branch in South Carolina was established in 1957 in Florence by the University of South Carolina. In 1970, this branch was separated from the University of South Carolina and became an independent four-year institution, Francis Marion State College. In 1959, the University of South Carolina established branches at Lancaster and Beaufort, and in 1960, the University assumed the responsibility of operating the Coastal Carolina campus at Conway, which had previously obtained limited aid from the

College of Charleston. Additional regional campuses were opened in Aiken in 1961, and in Union in 1965. That same year, the first multi-county facility, the Salkehatchie Regional Campus, was opened at Allendale for Allendale, Hampton, Bamberg, and Barnwell counties. The most recent is at Spartanburg which opened in 1967.(1)

As stated in the bulletin of the University of South Carolina, "the regional campuses at Aiken, Coastal Carolina, Lancaster, Spartanburg, and Union are organized as branches. The Beaufort and Salkehatchie regional campuses are designated as centers." In simplest terms, this means that the first five institutions are degree-granting divisions of the University of South Carolina which could be evaluated as autonomous institutions in terms of the standards of the Southern Association of Colleges and Schools. The latter two institutions, however, cannot award degrees and all "admission requirements and procedures, courses to be offered, and faculty shall have the approval and be under supervision of appropriate departments on the home campus."(2)

In the 1966-67 academic year, Clemson University opened a center in Sumter and also began to provide college parallel work through a contractual arrangement at the Greenville Technical Education Center. These two operations have continued uninterrupted as non-degree-granting "centers".

In addition to the regional campuses operated by the University of South Carolina and Clemson University, the College of General Studies of the University of South Carolina operates, on its main campus in Columbia, what is commonly referred to as the "Midlands Branch" which primarily was intended to provide terminal occupational and vocational programs. However, credits earned in some of the Midlands Branch programs--e.g., Law Enforcement, Nursing--are transferable to baccalaureate curricula.

The principal purpose for the operation of branches or centers is to make

available freshman and sophomore level college offerings at locations which enable students to commute from their homes. Both institutions give assurance that students admitted to the college parallel programs may readily transfer between the various units (including the main campuses) of the parent institutions any time between semesters. In addition to the college parallel programs, the University of South Carolina offers occupationally oriented programs in Commerce, Secretarial Science, and Law Enforcement. In 1971-72, both university branch and center systems have begun to accept students under "branch admissions" programs which are intended to help students who cannot meet normal admissions requirements because of deficiencies. These branch admissions programs give students an opportunity to bring their performances to levels which allow them to continue as regular fully-admitted students after one or two semesters.

Student tuition and fees at the University of South Carolina and Clemson branches and centers are generally similar to those found at the parent institutions.

Technical Education Centers

A special program for post-secondary technical education was authorized in 1961 when the South Carolina General Assembly established the State Committee for Technical Education. The technical education system has a number of missions, but the major purposes are stated as follows: "First, to provide industrially oriented education and training opportunities for South Carolinians, based on present and projected job needs in the State. Second, to provide training for new and expanding industries as an inducement for industrial plant location within the State." (3)

The first permanent technical education center was opened in Greenville in 1962. Richland (now Midlands), Tri-County, Spartanburg, and Sumter began instruction in September of 1963 and in January of that same academic year, the

centers in Charleston and Florence became operative. Other Centers opened in York (1964), Greenwood (1966), Conway (1966), Orangeburg (1968), and Cheraw (1969). A technical education center is expected to be fully operational in Aiken in September of 1972.

The technical education centers are the only institutions in the technical education system to offer associate degrees at the present time. However occupation instruction is offered to high school graduates at some of the other regional centers, and it is anticipated that they may institute associate degree programs in the future.

The programs currently offered at the various technical education centers fall into a number of general categories. There are, for example, associate degree programs in various areas of agriculture, business, engineering technologies, and allied health professions. Other programs of two years or less duration are also available in these areas, as well as in industrial, service, and trade specialties.

Eight of the technical education centers are now accredited as special purpose institutions by the Commission on Colleges of the Southern Association of Colleges and Schools. This means that "they are recognized as collegiate institutions in view of the fact that Associate Degrees are awarded for some of their curricula. Those courses which are offered for collegiate credit (applicable toward an Associate Degree) should be considered to be collegiate level work. In some cases, due to the specialized objectives of these programs, technical courses offered at the collegiate level by the Technical Education Centers are not readily applicable toward traditional baccalaureate degree programs such as engineering. General education courses, however, should in most cases be parallel to general education work offered in most Baccalaureate Degree institutions."⁽⁴⁾

Tuition in Technical Education Centers varies from an annual low of \$167 to a high of \$287. The average annual tuition for all of the Technical Education Centers is \$204.

Two-Year Post-Secondary Facilities

The Technical Education Center system and the off-campus University Branch system together now occupy buildings totalling just under 2 million gross square feet of space. At a quite conservative estimate, this represents an investment in capital facilities alone of \$40 million, exclusive of land, and not including the equipment which makes the buildings functional as centers of learning and training. Both systems have followed a policy of requiring the county or area served to provide these capital facilities, utilizing to the maximum extent possible whatever programs of federal assistance were available such as the Higher Education Facilities program.

All of these facilities taken together are situated such that more than 97% of the area of the state is located 30 miles or less from either a Technical Education Center or a University Branch or both (Figure 4). Only an insignificant portion of the state's total population lives more than 30 miles from one or both kinds of institutions. More than 50% of the area of the state lies within 30 miles of both a Technical Education Center and a University Branch or Center. Because these institutions are for the most part concentrated in areas of the state which are the more densely populated, these areas of dual coverage are concentrated in two broad bands running roughly east and west across the state--one in the northern portion extending from Anderson and Oconee in the west to Lancaster in the east, and another across the midsection of the state extending from Edgefield and Aiken in the west to Horry in the east.

Enrollments

Fall full-time student enrollments in Technical Education Centers grew

from 1,167 in 1964 to 5,943 in 1970 (Tables I, II). It is estimated in Chapter II that full-time enrollment in occupational and vocational programs will reach 12,000 students by 1980. Autumn full-time enrollment in the University Branches and Centers in 1970 was 2,683 (Table III). It is estimated in Chapter II that, presuming little or no change in the mode of operations of these institutions, this figure will climb to about 4,200 full-time students by 1980, an increase of more than 55%. Enrollments in all other public senior institutions, exclusive of the Branches and Centers, is expected to increase by only 48% over the 1970 figure by 1980. More detailed enrollment data concerning two-year institutions can be found in the Report of the South Carolina Community College Study Committee which is included as Annex K of Volume II of this report.

Fiscal Support

In 1970-71, direct state support for the operation of these two systems amounted to \$13.93 million--\$12.35 million for the Technical Education system and \$1.58 million for the University Branch and Center systems. Because of the distinctive nature of the Technical Education system, and particularly the large number of special and part-time training programs, accurate unit cost comparisons between this system and the University Branches and Centers are not available. On the premise that there is a direct relationship between these state costs and enrollment, and assuming that the Commission on Higher Education's enrollment projections are accurate, this annual cost to the state will increase to about \$27 million by 1980--an estimate that provides neither for possible increased costs of instruction nor for the effects of any inflation that might occur.

The 1971 General Assembly instructed the Commission on Higher Education and the State Committee for Technical Education, jointly, to devise a plan or

plans for implementation of a community college system in the state. In accord with this mandate, the Commission and the State Committee appointed a Study Committee to make recommendations to them as to such a plan or plans. The recommendations required by the Governor and the General Assembly, and the Committee report, have been published under separate cover as a part of this Goals Report. In addition, the report of the Study Committee is included as Annex K, Volume II, of this Report.

The Study Committee defined a community college as ". . . a publicly-supported comprehensive institution of higher education offering programs of instruction extending not more than two years beyond the high school level, which programs include courses in occupational and technical fields, the liberal arts and science curricula usually found in lower-division college programs, continuing adult education, and special training and other services to meet economic, cultural and training needs of the region served. Such colleges and usually commuter colleges only, charge reasonably low tuition to students, have well developed programs of testing, guidance and counselling, and have relatively open admissions policies buttressed by developmental training programs as needed."

The Study Committee stated that the most desirable plan for implementing such a system of comprehensive two-year colleges required the establishment of a revised system of governance for public two-year post-secondary institutions. It therefore adopted as its prime recommendation the creation of a new State Board to govern all Technical and Community Colleges. The new Board would be empowered to develop a planned system of two-year institutions, including division of the state into districts or service areas utilizing criteria such as population, commuting distance and the existence of other institutions. The objective would be to have in operation within each district at least one public two-year institution, with the programs offered to be largely determined by

local needs. The new Board would begin by assuming administration of all of the existing institutions including those operated by the State Committee for Technical Education, which would be replaced by the new Board, and all of the Branches and Centers now operated by the two senior universities. At least one year of planning would be required before any substantive changes would be made in any given institution.

Recognizing the inherent difficulty in accomplishing such a sweeping change in governance of these institutions, the Committee also recommended an alternative procedure which would preserve the existing separate governing systems, but which would create the possibility of development of comprehensive institutions either through merger of existing units or expansion of the role of existing campuses.

The Commission on Higher Education approves the prime recommendation of the Study Committee as being the most desirable objective for public two-year post-secondary education. The Commission also recognizes that it may be difficult to implement this prime recommendation immediately.

Jointly, the State Committee for Technical Education and the Commission on Higher Education have adopted a third alternative recommendation, which combined some of the features of both Study Committee recommendations. These recommendations are included also in Annex K, Volume II of this Report.

The joint recommendation is summarized briefly as follows:

1. That a new State Board to replace the State Committee for Technical Education be created, and that the Chairman of that new Board be empowered to sit ex officio as a member of the Commission on Higher Education, and that the new Board bear the same relationship to the Commission on Higher Education as do senior college and university Boards.
2. That the new Board assume the governance of all existing institutions operated by the State Committee for Technical Education, but not the

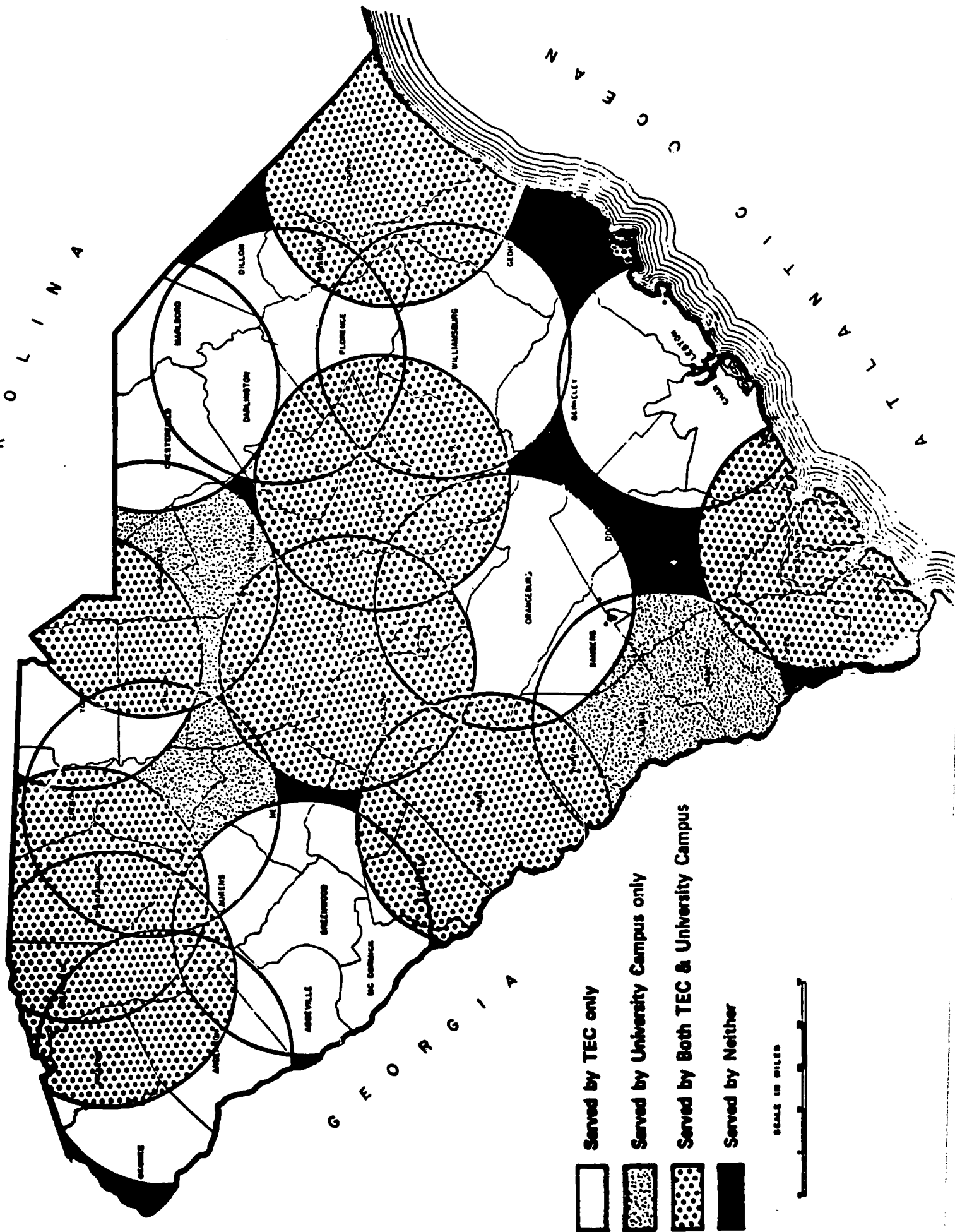
University Branches and Centers.

3. That having established criteria for the establishment of new, and the continuation of existing two-year institutions, the new Board may seek the approval of all the necessary authorities, where a local need exists, to create comprehensive institutions either by the addition of lower-division college curricula to Technical Education Centers, or by merging two or more public two-year institutions, or by the addition of occupational and vocational curricula to a University Branch or Center.

GEOGRAPHICAL COVERAGE BY STATE-SUPPORTED TWO-YEAR POST-SECONDARY INSTITUTIONS

N O R T H

C A R O L I N A



FULL-TIME DEGREE OCTOBER 30 ENROLLMENTS

CENTER	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Berkeley-Charleston-Dorchester	109	199	189	235	231	249	319
Chesterfield-Marlboro						62	79
Florence-Darlington	50	121	180	293	327	363	377
Greenville	279	337	415	363	452	568	806
Horry-Georgetown			17	15	78	115	132
Midlands	202	316	415	382	416	583	736
Orangeburg-Calhoun					84	226	250
Piedmont			76	80	73	140	147
Spartanburg	50	109	149	133	167	165	208
Sumter Area	25	43	35	29	64	84	126
Tri-County	63	112	172	165	156	190	215
York County	16	83	100	115	107	128	105
TOTAL	794	1320	1748	1810	2205	2873	3500

Table I

FULL-TIME DIPLOMA OCTOBER 30 ENROLLMENTS

CENTER	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70	1970-71
Berkely-Charleston-Dorchester	70	79	140	166	168	288	323
Chesterfield-Marlboro					51	55	61
Florence-Darlington	48	76	61	140	211	189	179
Greenville	89	213	203	278	272	361	362
Horry-Georgetown			118	151	130	199	257
Midlands	14	0	0	0	11	70	115
Orangeburg-Calhoun					63	120	233
Piedmont			35	69	97	102	140
Spartanburg	39	94	105	113	105	161	240
Sumter Area	23	139	115	151	137	148	171
Tri-County	69	92	141	148	75	123	163
York County	21	56	84	123	138	282	199
TOTAL	373	749	1,002	1,339	1,454	2,061	2,443

Table II

FULL-TIME OPENING FALL ENROLLMENTS

<u>INSTITUTION</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
CU/Greenville	234	148	110	163	190
CU/Sumter	171	151	128	159	187
USC/Aiken	317	284	248	290	572
USC/Beaufort	76	49	72	85	125
USC/Coastal Carolina	261	291	294	341	450
USC/Lancaster	250	248	266	357	415
USC/Midlands*	-	-	-	659	799
USC/Salkehatchie	102	59	44	74	149
USC/Spartanburg	132	303	340	380	510
USC/Union	143	188	158	175	201
Total	1,686	1,721	1,660	2,683	3,598

*Midlands enrollments included with Main Campus Statistics until 1970.

Table III

References

- (1) Survey and Principles for Implementation; South Carolina Two Year Post High School Education, (Report by the Thomas Committee prepared for the Commission on Higher Education of the State of South Carolina), June 6, 1968, pp. 2.4 and 2.5.
- (2) Standards of the College Delegate Assembly, (The Southern Association of Colleges and Schools), December 1, 1963:3.
- (3) Guide to Technical Education in South Carolina, (Prepared by Division of Program Services, South Carolina Committee for Technical Education, Columbia, South Carolina), March, 1971, Preface.
- (4) Correspondence from the Southern Association of Colleges and Schools to South Carolina Commission on Higher Education, May 11, 1971.

CHAPTER XI

MEDICAL EDUCATION

It is a fact that by most indices of the health of the population, South Carolina ranks at or near the bottom in comparison with other states. It ranks 49th in maternal deaths, 48th in infant deaths. South Carolinians, at birth, have shorter life expectancy than residents of any other state. The state can only provide 81 physicians per 100,000 population, compared with a national average of 141 per 100,000 population.

The number of physicians is of particular concern to the Commission since the role of the Medical University of South Carolina exerts such an important influence on the numbers of physicians practicing in the state.

South Carolina has enjoyed one of the best retention rates of its medical school graduates, with approximately two-thirds of the graduates of MUSC ultimately located in the state. Can needs be met by expanding MUSC, or should a second medical school be created?

A Special Medical Education Committee was appointed by the Commission to advise the Commission as to the educational structure that should be developed to meet South Carolina's requirements for physicians. The report of the Committee is included in Volume II.

The Commission is in agreement that South Carolina should strive to attain as its goal the national median of 130 doctors per 100,000 population which the Carnegie Commission has projected for the year 1975. It is desirable that this goal be reached as soon as possible but there appears to be no unanimous agreement that this can be accomplished at the Medical University of South Carolina alone.

With or without a second medical school there is presently an urgent need to immediately provide training and teaching facilities at Columbia, Greenville

and Spartanburg for undergraduate and graduate students. This is necessary to meet needs generated by recent increases in entering class size at MUSC. The first step must be the prompt establishment of a strong residency training program in these cities supported by a capable, full-time faculty which must be a part of the MUSC faculty and financially supported by the state.

Students should not be sent from the parent institution to a regional education center until the center has demonstrated the capability to offer an acceptable program. The regional center program must be equally as good in every respect as that offered at MUSC and under its direct control and continuing supervision.

Such programs will provide presently needed educational facilities for undergraduate students and resident physicians. In addition, they will substantially form the nucleus of Area Health Education Centers as suggested by the Carnegie Commission to upgrade the quality of medical care in the regions served. These Centers should also train paramedical personnel such as nurses, midwives, laboratory and X-ray technicians as well as physicians' assistants, and would logically serve as major referral centers for their regions. All should be tied into a statewide medical network. The Commission recommends that Regional Health Education Centers be developed as expeditiously as feasible.

The Commission is not at this time in full agreement that such a system will in itself provide enough educational facilities for the sharp increase in the number of physicians in South Carolina that appears to be necessary to reach the desired goal. It is an accepted standard that there is a need for approximately eight beds per entering medical student in a medical school. It appears that MUSC at this time does not have the number of beds recommended to educate the class of 1975 when it enters its clinical training program no later than September of 1973. It is for this reason among others that the Commission recommends the above stated program.

Until definite and satisfactory long-term agreements are confirmed between MUSC and Roper and St. Francis hospitals in Charleston, the Commission recommends that the number of students accepted in the first-year classes at MUSC be limited to the ability of MUSC to provide the necessary number of teaching beds under its control in Charleston and in the Regional Health Education Centers.

At the present time this number cannot be determined with any degree of accuracy. It appears that it will take at least several months before MUSC can complete the necessary agreements with all hospitals involved. It is only after the number of teaching beds are firmly agreed to that a realistic estimate of the maximum number of entering students can be made. After this has been done, an answer can then be provided as to the need of a second medical school.

If in the opinion of the Commission, after a reasonable period of time it is determined that the program outlined herein will not meet the medical needs of South Carolina, consideration of a second medical school will be reopened.

Under any circumstances it would appear wise for the state to provide a medical education supervisory mechanism ideally under the Commission on Higher Education to insure that monies appropriated for all medical education are wisely spent and to prevent costly competition for scarce tax dollars. It is recommended that this be accomplished.

An appropriate state agency should immediately be given responsibility to evaluate and analyze the numbers, kinds and distribution of doctors necessary to the well-being of the people of South Carolina. This agency should create an in-depth data bank of doctors currently practicing and doctors currently in residencies; the state should make every effort to retain these residents in the state of South Carolina. In addition, the agency should analyze those factors which attract residents, and the state should make every effort to increase the immigration of physicians as residents. This agency should also study the new developments in delivery of health services and should continually relate these

activities to their accomplishments in meeting the needs of the people of South Carolina for health care services. Whether or not the state will reach the desired goal will depend to a large extent on federal decisions concerning medical care and medical education, and the extent to which federal funds are made available.

CHAPTER XII
NONPUBLIC HIGHER EDUCATION

Introduction

There are in South Carolina 26 nonpublic colleges and universities, excluding the Southern (Lutheran) Theological Seminary in Columbia. This group of institutions, made up of 19 senior and 7 junior colleges, is listed in Table I.

Almost all of the senior institutions are four-year general purpose colleges, which began as and whose core remains in the liberal arts tradition, but which have added professional and pre-professional training in education, the ministry, business, the law, and the health professions. Of the 19, the majority--12--were founded and are still controlled by various sectarian bodies.

The junior colleges within the private sector all offer lower-division curricula which are largely transferable to upper-division baccalaureate programs. In addition, some of these also provide programs of an occupational or vocational nature, of two years' duration or less, designed to provide skills directly fitting students for jobs.

With but two exceptions, all of these institutions were founded in the middle or late nineteenth, or early twentieth centuries. Their growth has therefore paralleled that of the public sector. This dual pattern of public and nonpublic higher education is not unique to South Carolina, but is duplicated in large measure in most eastern seaboard states, and most markedly in the southeastern states.

Both because there is a generally shared philosophy in all of the higher education community that this dual system of American higher education needs to be preserved for its diversity; and because it would be beyond the financial capability of South Carolina to duplicate or to absorb all of its private institutions, the Commission believes that its planning efforts must take into

account the health and vitality of the nonpublic sector.

The Role and Scope of the Private Sector

Of the 19 senior colleges in the state, all are primarily liberal arts colleges. Most of these have also responded to public needs--e.g., in the provision of professional programs in teacher preparation--as they have been able to do so. Graduate programs are not in evidence, except for master's-level programs in education at Furman University and in education and in music at Converse College, and doctoral programs in theology at Bob Jones University. Not one of the private institutions in South Carolina has attempted to expand to full university status, with doctoral-level programs in a wide variety of academic fields. This one fact provides the most distinctive feature between the roles of the public and private sectors.

At the undergraduate level, the academic roles of the public and private sectors are remarkably similar, at least in the large. Within the private sector itself, the most distinctive feature appears to be the matter of the academic calendar used⁽¹⁾ whereas no public institution in the state has yet departed from the two-semester calendar. This may, in fact, represent a relatively minor manifestation of the private sector's freedom to experiment with new ideas and new techniques in education.

For the decade, the private institutions will continue to emphasize undergraduate education, particularly in the liberal arts.

Most also expect to remain relatively small--14 of the 19 senior colleges now enroll less than 1000 students--primarily because they hold the view that their size encourages desirable access of student to teacher and of student to student, partly because sharply increased tuition and fees have restricted the pool of applicants available to them. But like most virtues, smallness bears a price: most educators believe that economies of scale are not applicable in

colleges enrolling less than 1000 students. One must be able to afford to be small.

The Commission recommends that cooperative arrangements between public and nonpublic sectors of higher education be encouraged; and, just as importantly, that cooperative arrangements between institutions in the nonpublic sector be expanded as well. In the private no less than in the public sector, no college can or should strive to meet all needs; but cooperative ventures between neighboring colleges can and should share existing strengths as well as shore up possible weaknesses.

The Commission also believes strongly that the nonpublic sector of higher education should be more formally involved in higher educational planning, since neither the public nor private sectors can stand alone. It is for this reason that the standing Committee of Nonpublic College Presidents recommended elsewhere in this report (Chapter XIII) is important.

Enrollment, Faculty, and Finances

The private sector enrolled, in 1970, a new high of 23,200 students, 39% of the total enrolled in all of higher education in the state. In terms of South Carolina residents, the fraction may be slightly higher, since it is believed that South Carolina residents make up a slightly larger fraction of the enrollments in the private than in the public sectors⁽²⁾. This difference, however, is only marginal.

Fall 1960 enrollments in the nonpublic sector were about 14,400. The 10-year gain in enrollments in this sector was about 61%. For the same decade, enrollments in the public sector increased from 16,500 to 36,500, or 121%. It is interesting to note that the growth rates in enrollment in the state were very nearly the same in the public and private sectors in the first few years of the decade just closed, but that these rates diverged after about 1964.

Because of this changing pattern of enrollments, the nonpublic sector's

share of the total enrollments dropped from 47% in 1960 to 39% in 1970. It is predicted⁽³⁾ that this trend will continue to the latter part of this decade, when the private sector's share is expected to be about 35% of the total. But this does not mean the enrollments in the private sector are expected to decline: in fact, the estimate is that these enrollments will increase by 29%, to just under 30,000, by 1980.

The changing pattern of enrollments in South Carolina reflects the national trend. In 1960, 41% of all degree-credit students were enrolled in the private sector, but by 1970, this fraction had decreased to 27%⁽⁴⁾, even while enrollments in the private sector were increasing by 40%.

Elsewhere in this report (Chapter II), it is demonstrated that in South Carolina there is little difference between the public and private sectors in the matter of admissions policies. Valid differences between institutions within sectors do exist, but each sector displays within itself a diversified range from virtual "open-door" to modest admissions standards. No South Carolina institution, public or private, maintains exceedingly high admissions requirements.

But the private sector does erect one formidable barrier to prospective students: much higher tuition and fees. All of higher education has been faced with increased costs of education, especially in recent years. The private sector, not just in South Carolina but in every other state as well, without recourse to appropriations of public tax dollars for operating expenses, with limited endowment funds, and with limited support from controlling bodies--especially sectarian ones--has had no alternative but to pass on these increased costs to the student. This factor is undoubtedly the dominant one in the declining share of total enrollments in the private sector; especially in South Carolina, where the admissions policies and academic programs are in the large, very nearly the same in the two sectors.

The differential in required tuition and fees between the public and non-public senior colleges in South Carolina has increased sharply during the 1960's. In the Table below are shown average tuition and fees, required of S.C. residents and exclusive of room and board, in a representative sample of public and nonpublic institutions in the state for the decade.

Average Tuition and Fees Per Academic Year,
S.C. Colleges and Universities

<u>Year</u>	<u>Average Tuition and Fees</u>		
	<u>Public Sector</u>	<u>Nonpublic Sector</u>	<u>Differential</u>
1960-61	\$314	\$ 529	\$215
1965-66	399	894	495
1970-71	499	1379	830

Required tuition and fees at public institutions increased by 69% over the decade, while those at nonpublic institutions were forced up by 161%. The result is that the differential, between these sectors, in required fees has increased by 310%.

The recruitment of students is therefore a more pressing problem for the private sector than for the public. It should be emphasized, however, that the tuition grants program recommended elsewhere (Chapter VII) is focused on the needs of students, not of institutions. For one thing, tuition and fees collected from students fall short, even in the private sector, of paying for the full cost of instruction. Thus only in the case of those students who could occupy classroom seats that are available and would otherwise be empty would this grants program prove of indirect benefit to institutions.

Rapidly rising costs and limited income have produced, in this state as well as every other, severe budgetary problems in virtually every college. It has been reported⁽⁵⁾ that every private accredited college either operated at a deficit at least one year in the last two or has found it necessary to budget one for 1971-72. To offset these trends, the colleges can be expected to all

within their power to trim expenses: eliminating or delaying capital improvements, eliminating some educational programs of marginal utility, and perhaps even increasing the student-faculty ratio. This last is reflected in the fact that while enrollments are expected to increase by about 29% over the decade, the number of faculty will increase by only about 19%. But this would mean a relatively modest increase in the student-faculty ratio in this sector from just under 16:1 today to just over 17:1 by 1980.

Of the 26 nonpublic institutions, 19⁽⁶⁾ (73%) report current physical plant making up more than 6 million gross square feet in 550 buildings valued now in excess of \$105 million. These same institutions plan by 1980 to invest \$70 million in renovation and in new physical facilities, which would represent a 67% increase in plant value, in constant 1970 dollars.

In the vital area of library services, it has been noted⁽⁷⁾ that, of 19 nonpublic institutions, 8 have library buildings considered to be adequate, and 11 have facilities reported to be either crowded or inadequate. Of 22 nonpublic institutions reporting⁽⁷⁾, only 7 exceeded recommended minimal standards.

The Commission reiterates its belief that it is in the best interest of the general welfare that the state assist the nonpublic colleges. The Commission therefore recommends in Chapter VII that constitutional barrier to state assistance to these institutions be eliminated, and adopts as an objective for the decade the close and continuing study of how such assistance may best be tendered in the public interest. Such financial assistance may include, among other things, contracts for special services such as the operation of teacher-preparation programs, operating subsidies in the form of cost-of-education grants per baccalaureate degree granted, or tax credits for tuition payments.

At the least, until such time as a student grants program of more general applicability can be enacted, it is recommended that funding levels for the

Tuition Grants Act of 1970 be increased over that established in 1971-72.
Specifically, it is recommended that \$200,000 be provided for 1972-73 and that
the level of funding be increased to \$400,000 per year for 1974-75 and there-
after.

The state Supreme Court has ruled that only students at those accredited colleges not controlled by sectarian bodies are eligible to participate in the Tuition Grants program. At the present time, only four such institutions have been ruled eligible: Benedict, Coker, Converse and Limestone colleges.

The S. C. College Council has noted that all of the 19 nonpublic accredited colleges in the state could have provided up to 7000 additional student places in 1971-72 without major capital expansion or without the necessity for substantial faculty addition.

The Commission also notes that the geographic dispersion of existing public colleges and universities throughout the state, including the universities' branches and centers, makes it unlikely that any new or additional public campuses can or will be needed for the years through 1980. Although each case would need to be studied on its merits at the time, this fact and those of simple economics argue against the acquisition by the state of any additional colleges which may be forced to close their doors during this decade.

The recommendations and objectives set forth in this Chapter can go far toward strengthening, as well as preserving, the dual public and nonpublic sectors of higher education. On both philosophical and pragmatic grounds, the existing dual system is vital to the future health and welfare of all South Carolinians. The Commission seeks to help the sectors join hands in common cause.

References

- (1) Annex H--Report of the Long Range Committee on Private Higher Education.
- (2) Annual Report, 1970, S. C. Commission on Higher Education, Columbia, S. C., 1970. Appendix F, Table F-1, p. 43.
- (3) Chapter II. ENROLLMENTS AND ADMISSIONS.
- (4) A Fact Book on Higher Education, Volume I, 1971. American Council on Education, Washington, 1971. Table 71-9.
- (5) Annex H.
- (6) Annex H.
- (7) Annex G--Report of the Long Range Planning Committee on Libraries.

TABLE 1

Institution, Location

<u>Senior Colleges</u>	<u>Year Founded</u>	<u>Control or Affiliation</u>
Allen University, Columbia	1870	African Methodist Episcopal
Baptist College at Charleston	1960	Baptist
Benedict College, Columbia	1870	Independent
Bob Jones University, Greenville	1927	Independent
Central Wesleyan College, Central	1906	Wesleyan Methodist
Claflin College, Orangeburg	1869	Methodist
Coker College, Hartsville	1908	Independent
Columbia Bible College, Columbia	1923	Independent
Columbia College, Columbia	1854	Methodist
Converse College, Spartanburg	1889	Independent
Erskine College, Due West	1839	Assoc. Reform Presbyterian
Furman University, Greenville	1826	Baptist
Lander College, Greenwood	1872	County
Limestone College, Gaffney	1845	Independent
Morris College, Sumter	1908	Baptist
Newberry College, Newberry	1856	Lutheran
Presbyterian College, Clinton	1880	Presbyterian
Voorhees College, Denmark	1897	Episcopal
Wofford College, Spartanburg	1854	Methodist
<u>Junior Colleges</u>		
Anderson College, Anderson	1911	Baptist
Clinton Junior College, Rock Hill	1894	African Methodist Episcopal
Friendship Junior College, Rock Hill	1891	Baptist
North Greenville Junior College, Tigerville	1892	Baptist
Palmer College, Charleston	1911	Independent
Palmer College, Columbia	1903	Independent
Southern Methodist College, Orangeburg	1956	Methodist
Spartanburg Junior College, Spartanburg	1911	Methodist

CHAPTER XIII

COMMISSION ON HIGHER EDUCATION

The Commission on Higher Education was created by the General Assembly in 1967 as the agency of state government specializing in higher education. The Commission studies, plans, and recommends in seeking the goals of higher education. It is a coordinating body which must rely primarily on logical persuasion to gain cooperation and support. It has directive authority only in the area of programs, and recognizes and respects the responsibility for governing the institutions which have been placed on the boards of trustees or visitors. The boards were created by the General Assembly and while the statutes creating them vary in form and content, it is apparent that the intent of the General Assembly is to place full responsibility on the boards for the proper operation of the institutions and to invest in them the full authority of government in carrying out these responsibilities. The Commission seeks no diminution of the powers of the boards, but on the contrary believes that one of its primary missions is to reinforce their role by serving as a focus and stimulus for actions which the boards seek.

The Commission on Higher Education is essential if the state is to develop maximum opportunity for higher education in the most efficient manner. Without central direction the total effort will be fragmented, unnecessarily redundant, and uneconomical. The Commission has made significant progress in improving higher education in South Carolina even though the staff is small in comparison to higher education coordinating staffs in other states, and anticipated staff expansion is modest. However, past experience indicates that the future role of the Commission on Higher Education can be more effective if certain changes in organization and operation are adopted as discussed in the following paragraphs.

As established by the General Assembly the Commission consists of seven members appointed by the Governor, plus the Chairman of the Board (or a representative from the Board appointed by the Chairman) of each state-supported institution of higher education, who is a member ex officio. At the time of the establishment of the Commission in 1967, South Carolina had six state-supported institutions so that in fact the General Assembly created a body with a majority of appointed members. In 1969, the creation of a State College Board of Trustees, governing Francis Marion College and the College of Charleston, automatically increased ex officio membership on the Commission by one, thereby establishing an equal number of ex officio and appointed members.

In meeting its legal responsibility to submit recommendations to the State Budget and Control Board and the General Assembly, the Commission must consider not only the requirements of the institutions of higher learning, but also the statewide opportunities and constraints which relate to the requirements.

The chairmen of the boards of trustees should not be expected to objectively consider matters of public policy directly affecting their institutions. Since it can be presumed that among them there is a convergence of views on issues affecting their institutions, it is reasonable to assume that a Commission equally divided between ex officio and appointed members can become deadlocked on important issues, or possibly resolve them in favor of the public institutions essentially through the consensus of the ex officio members. The possibility appears to have been a consideration in seven other Southeastern states in establishing higher education coordinating agencies. Three have no members representing institutions of higher education while within each of the other four, such members are in a minority and in one case have no vote.

It is in the best interest of the state to have a Commission on which representatives from the public institutions of higher education are in the minority, although the institutions should be represented to assure full consideration of

the institutional viewpoint. This could be achieved by decreasing the number of members representing institutions, by reducing the number of these who can vote, or by increasing the number of appointed members. If the number of members could be reduced, e.g. to one member from all universities, one member from all colleges, and one member from the two-year system, some members now active in the affairs of the Commission would be eliminated and some institutions would not be directly represented. If the present number of members were unchanged but the vote restricted to the appointed members, it can be anticipated that the current board chairmen would not accept a non-voting role. If an eighth member were appointed by the Governor, the desired result would be achieved within the current membership. It is recommended that the statutory authority creating the Commission be amended to provide that the number of members appointed by the Governor shall always exceed by one the total number of ex officio members.

As organized, the Commission has no member representing nonpublic institutions of higher education, presumably since matters involving public institutions should not be subject to undue influence from the nonpublic institutions, particularly when those matters include consideration of public funds. But it is a fact, discussed in detail elsewhere, that the continued viability of the nonpublic sector of higher education is of grave concern to the Commission. Out of this concern comes the belief that the nonpublic institutions should have direct access to the Commission to ensure its members have full cognizance of the situation in the nonpublic institutions. Legislation creating the Commission also created the Council of Presidents of the state institutions of higher education with authority to submit reports to the Commission upon request or upon the initiative of the Council. A parallel body representing the nonpublic institutions is desirable.

It is recommended that the statutory authority creating the Commission be

amended to establish a Committee of Nonpublic College Presidents as an advisory body for the Commission. The Committee should consist of eight members selected by the South Carolina College Council. Terms of members should be for four years, except that of those first appointed, two of which should be for four years, two for three years, two for two years, and two for one year. The Committee should meet upon the call of the Chairman and meet at least once annually with the Commission. The Committee could investigate and report at any time either upon request of the Commission or upon its own initiative, on any matter pertaining to nonpublic higher education which is considered relevant to the affairs of the Commission.

The Commission has responsibility for reviewing annual budgets prepared by the state-supported institutions of higher education and submitting recommendations to the Budget and Control Board and the General Assembly. This statutory responsibility of the Commission affords the opportunity to submit objective budgets covering requirements for all state-supported institutions of higher education. To fully and effectively discharge this responsibility the Commission should hold hearings with institutional representatives to afford ample opportunity to question and explain, and should make a presentation on behalf of all institutions to the Budget and Control Board and the General Assembly. This presentation, which will include full consideration of individual budgets, will project a coordinated, substantiated request for funds for all public institutions of higher education. These procedures could be implied as being within the existing legislation but to avoid any misunderstanding it is desirable to have them stated explicitly. It is recommended that the statutory authority creating the Commission be amended to provide for submission of the budgets of the public institutions of higher education initially to the Commission, for the Commission to hold open hearings on the budgets and for the Commission to make a unified budget presentation to the Budget and Control Board

and the General Assembly on behalf of all institutions. It is understood that when an institution's budget is under consideration, that institution's representative on the Commission will abstain from voting.

The Commission is authorized to make such recommendations as it considers desirable to the State Budget and Control Board and the General Assembly as to the physical facilities of all state-support institutions of higher education. Under the same authority, the State Budget and Control Board may refer to the Commission for investigation, study and report, any request from institutions of higher education for new or additional appropriations for capital improvements. Through arrangements between the Commission and the Board all requests for permanent improvements from state-supported institutions are initially submitted to the Commission for review and transmittal to the Board together with comments and recommendations. This procedure provides an assessment of need for the improvement from the state agency specializing in higher education, and significantly assists the Board and General Assembly when taking action. This procedure has only recently been instituted, but its value to the state is evident. To avoid any possible misunderstanding of the role of the Commission in this matter, it is recommended that the statutory authority creating the Commission be amended to require that all requests for capital improvements from public institutions of higher education initially be submitted to the Commission for review and transmittal to the Budget and Control Board.

The responsibilities of the Commission in the area of student affairs have expanded rapidly to a point where it is considered desirable to organize a specific staff element to handle them. For over two years the Commission has been the responsible state agency for the statewide Guaranteed Student Loan Program. On July 1, 1970, it assumed administrative responsibility for the South Carolina Defense Scholarship Fund and for state involvement in the student aid activities of the Southern Regional Education Board. Commission

responsibilities for student aid will be increased if the recommendations of CHAPTER VII are implemented. For two years the Commission has been the state agency to administer an internship program designed to place students in career-oriented employment in industry and government. The value of this program has been proven, and efforts will be made to expand it in future years. The General Appropriations Bill of 1971-72 includes a definition of student residency in higher education and charges the Commission on Higher Education to prescribe uniform rules for application and to provide for annual review of same. To meet these responsibilities and others relating to student affairs that might pass to the Commission in the future, it is an objective to establish a Division of Student Affairs on the Commission staff.

The Commission and the institutions of higher education have agreed on the need for a statewide system of uniform data identification and collection, reporting, budgeting, and planning in the five major categories of students, faculty and other personnel, facilities, courses and finances. The Commission staff has undertaken the development of the system although handicapped by the lack of qualified personnel in adequate numbers. Funds are now available for additional staff members and qualified personnel are being recruited. It is an objective to make fully operational a computerized management information system.

The Commission has responsibility to approve all new programs before they are undertaken by any state-supported institutions of higher education unless approved by the General Assembly. This is essential to avoid unnecessary programs, duplication, proliferation or commitment to programs which exceed capabilities, and to date the responsibility has been adequately met. In their plans for the 1970's the institutions have projected requirements for a great number of new academic, research, and public service programs, indicating a larger and more complex task for the Commission in meeting its legal responsibility.

Measures to ensure that the Commission adequately meets this responsibility are discussed in CHAPTER III.

The Commission on Higher Education believes there is tremendous potential for improving higher education in South Carolina through cooperative endeavors. It accepts without reservation the vital role it must play, and anticipates the achievements of the 1970's in higher education will be significant and enduring. The members of the Commission and staff are dedicated to developing a system of higher education which will be a source of great pride to South Carolinians.

LIST OF TABLES

	Page
I. <u>GOALS IN HIGHER EDUCATION</u>	13
II. <u>ENROLLMENT AND ADMISSIONS</u>	27
I. Age-Group Method Projections of Total College Enrollment (Headcount) in S. C. Colleges and Universities.	50
II. Individual Projections by Institutions, Total Headcount Enrollments.	51
III-A. Enrollment Projections, Total Headcount, Nonpublic Colleges.	52
III-B. Estimated Projections, Total Headcount, Nonpublic Colleges.	53
IV. Estimated Headcount Enrollments, Modified Age-Group Method.	54
V. Modified Age-Group Method Estimated Headcount Enrollments, Public Colleges.	55
VI. Actual and Projected (by TEC Staff) TEC Enrollments.	56
VII. Projected Enrollments, Technical Education Centers.	57
III. <u>ACADEMIC PROGRAMS</u>	59
IV. <u>FINANCING HIGHER EDUCATION</u>	73
I. Tuition and Required Fees, 1971-72.	77
II. Median Tuition and Fees, In-State and Out-of-State, Southeastern States, 1971-72.	78
III. Analysis of 1969-70 Educational and General Revenues.	80
IV. Who Paid for Winthrop's 1969-70 Costs?	81
V. 1969-70 Student/State Financial Support Ratios.	82
VI. S.C. Taxpayer Support for Current Operations of Public Colleges and Universities.	83
VII. FTE Student Enrollments - S.C. Public Colleges and Universities.	85
VIII. Average Appropriations to Public Colleges and Universities for Each Enrolled FTE Student.	86

IX.	Fall 1970 Student/Faculty Data Summary.	89
X.	Analysis of 1969-70 Educational and General Expenditures.	94
XI.	1970-71 Faculty Compensation Comparisons.	95
XII.	Average Salaries of Instructional Faculty.	96
V.	<u>CAPITAL IMPROVEMENTS</u>	103
I.	Physical Plant Assets.	120
II.	Growth of Physical Plant Space, 1966-1970.	121
III.	Growth of Physical Plant Assets June 30, 1968 to June 30, 1970 Book Value of Land, Buildings, and Equipment.	121
IV.	Assignable Square Feet Per FTE Student.	122
VI.	<u>FACULTY</u>	123
VII.	<u>STUDENT AID</u>	135
VIII.	<u>LIBRARIES</u>	145
I.	Volumes Held and Maximum Capacity for Books, June 30, 1970.	159
II.	Available Reader Space, 1970-71.	160
III.	Full-Time Library Staff and Work Space Per Staff Member, 1970-71.	161
IV.	Total Expenditures and Percent for Libraries, 1969-70.	162
V.	Per Student Expenditures for Libraries, 1969-70.	163
VI.	Library Expenditures, 1969-70	164
VII.	Holdings Compared with Association of College and Research Libraries' Standards, 1969-70.	165
VIII.	Periodical, Serial, and Microform Holdings, 1970-71.	166
IX.	Library Personnel, 1970-71.	167
X.	Library Circulation, 1969-70.	168
XI.	Interlibrary Loans, 1969-70.	169
IX.	<u>CONTINUING EDUCATION AND PUBLIC SERVICE</u>	171

	Page
X. <u>TWO-YEAR POST-HIGH SCHOOL EDUCATION</u>	181
I. Full-time Degree October 30 Enrollments.	191
II. Full-time Diploma October 30 Enrollments.	192
III. Full-time Opening Fall Enrollments.	193
XI. <u>MEDICAL EDUCATION</u>	195
XII. <u>NONPUBLIC HIGHER EDUCATION</u>	199
I. Nonpublic Institutions, Location, Year Founded, and Affiliation.	207
XIII. <u>COMMISSION ON HIGHER EDUCATION</u>	209

Figures

1. Actual a
1960-198
2. S.C. Col
Total, 1
3. Relative
4. Geograph
Post-Sec

**SOUTH CAROLINA COMMISSION
ON HIGHER EDUCATION**

**Goals for Higher Education
to 1980**

Summary

**Columbia, South Carolina
January, 1972**

Preface

To fulfill the mandate given it by the South Carolina General Assembly, in June 1970 the Commission on Higher Education initiated a major planning effort designed to produce a statement of goals for higher education in the state and to provide guidelines within which all segments interested in post-secondary education can work together for the common good. Each public institution of higher education was requested to submit a "Statement of Goals to 1980"; the responses were excellent and contributed significantly to the project. A number of committees were appointed, each to consider an aspect of higher education and submit a report. The membership of these committees reflected wide representation from the state's public and nonpublic institutions and agencies concerned with post-secondary education. The project drew heavily on pertinent literature on higher education such as the excellent series issued by the Carnegie Commission on Higher Education.

The results are presented in a report to His Excellency, The Governor and members of the General Assembly of South Carolina, "Goals for Higher Education to 1980, Volume I, Discussion and Recommendations." Volume II includes the reports as submitted by the various committees. This document is a brief summary of Volume I.

James A. Morris
Commissioner

Introduction

South Carolina's system of higher education has evolved over the years to meet the changing needs of people in our society. A wide variety of programs is offered through a comprehensive public network of two year centers for college parallel and technical education, regional colleges and universities. Private colleges complement the activities of public institutions, and have historically made significant contributions in terms of quality of programs and numbers of graduates.

Great progress has been made during the decade of the 1960's in higher education in the state as to both quantity and quality of output. Enrollment in post-high school education has increased from 31,540 in 1959-60 to 63,690 in 1969-70. Undergraduate degrees awarded in 1959-60 were 4,160 as compared to 7,870 in 1969-70. The number of master's degrees awarded annually during this period increased by 164% and the number of doctor's degrees by 720%. Research funds available at the University of South Carolina and Clemson University rose sharply during the decade. A much wider variety of programs at the post-high school level is now offered at the undergraduate and graduate levels, including graduate programs in dentistry, social work, engineering and the physical sciences, the humanities and the social sciences. Continuing education programs have expanded greatly and a start has been made in the use of new media such as educational television. During this decade both the technical education system and the regional campus system have provided greatly improved opportunities for occupational and college parallel education at the two year level.

Notwithstanding, South Carolina has a smaller proportion of the college age group in institutions of higher learning than almost any other state. The attrition rate at the college level is high enough to indicate

that resources are being wasted and that individual career objectives are being thwarted. Insufficient opportunities are being provided not only for recent high school graduates but also for adults who desire to enjoy college learning experiences while they continue their jobs. Moreover, professional and business people are not being adequately served with meaningful programs.

This report addresses itself to the entire spectrum of post-high school education in South Carolina and considers goals and objectives at this level for the decade of the 1970's. It is concerned with the higher education structure, programs, financial aspects of higher education, building needs, and the relationship between public and private institutions of higher learning. Inherent questions to be considered are these: who should go to college, what programs should be offered, and who should pay the costs of higher education.

It is important that parts of this report not be considered out of context. It endeavors to examine and submit recommendations concerning the total problem of providing the best quality of post-secondary education for a maximum number at minimum costs. The reviewer is urged to bear in mind the totality of the endeavor and to consider specific recommendations in the light of all other relevant material presented.

Statement of Goals

Evaluation of the adequacy of the state's higher education system must occur on the basis of the objectives to be achieved. In essence, higher education exists to provide opportunities for individuals to develop their intellectual capacities more effectively and to meet the needs of society for educated and trained personnel.

More explicitly, the institutions of higher education were created to meet needs of the people of South Carolina, and are sustained for the direct purpose of providing the programs and services that respond to the requirements of South Carolinians. The state's system of higher education is dedicated to fulfilling the hopes and aspirations of the citizens of the state and to that end seeks the following goals.

The primary goal of higher education is to provide the opportunity for learning beyond the secondary school level for all who need and seek it. The system must include a diversity of programs to meet a wide range of needs; it must emphasize the transfer of knowledge but be undergirded with a sense of responsibility for the development of moral, spiritual and aesthetic values. The objective of learning is the development of essential knowledge, skills, attitudes and values necessary to live effectively in a democratic society.

It is a goal to reduce the socio-economic barriers to higher education to ensure that the benefits of post-secondary training are not denied because of social environment or economic status. The issue is not one of lowering standards, which must be maintained, but rather one of extending special programs to those with potential to help them meet standards.

It is a goal to improve the efficiency of higher education as measured by the effective use of resources. The rising costs of higher education demand increased effectiveness in management at all levels and better accountability for the tax dollar. Maximum efficiency does not imply any decrease in the quality of education; on the contrary, it is anticipated that

increased efficiency will improve quality.

It is a goal to improve the quality of higher education. Quality of higher education is admittedly difficult to measure, but it must be related to teaching and research effectiveness at a particular level. It is possible to have high quality programs for students of normal ability which differ from high quality programs tailored to the needs of the exceptional student. Quality is not necessarily measured only by facilities, faculty, programs or numbers of graduates, but as a minimum able teachers and adequate library resources are essential to high quality educational performance. The goal is to support each institution to perform its educational role with quality standards relevant to the assigned mission.

It is a goal to encourage research and creative activity within higher education. Research is an essential element in post-baccalaureate education: it is vital to maintaining the health and vigor of graduate institutions. In fulfilling their educational missions, universities have made important contributions through research; the traditional role of research must be supported and encouraged.

It is a goal to better utilize the resources of higher education in public service. To an unprecedented degree, the state faces challenges and opportunities; how they are met can profoundly affect the future. In building the capability to carry out their primary missions, the institutions have acquired a high level of expertise in a wide variety of fields which has been applied to some degree to the affairs of the state. There must be greater application without significantly detracting from the primary mission of higher education.

It is a goal to sustain among the citizens of the state an appreciation for the accomplishments of higher education and an understanding of its commitment to improving the quality of life. The viability of the system of higher education depends directly on public support - with it, progress is possible; without it, decay is certain. Public support is neither inevitable

nor constant. A great sense of pride among South Carolinians in their system of higher education must be developed and maintained. A system of monitoring the output of the goals of higher education should be devised and communicated to the people of South Carolina. The graduates of public and nonpublic institutions should be encouraged to pursue their life's work within South Carolina to contribute toward improving the quality of life for all its citizens.

It is a goal to preserve a strong nonpublic sector of higher education, recognizing the vital contribution made by the state's private institutions and the adverse impact on the state if the load carried by them is significantly reduced. Rising costs are forcing private institutions to effect severe economies in operation and capital improvements to avoid unacceptable increases in tuition. At the same time public funds are being made available for essential operations and physical plant improvements at the public institutions. As the disparity in programs, physical plant, and tuition between the two systems grows, more and more students will inevitably turn to the public institutions. The goal is to maintain a reasonable share of total enrollments in higher education in the nonpublic institutions and to assist private institutions in every legal manner in order that they may carry out their missions more effectively.

In the pursuit of these goals, higher education in South Carolina will not isolate itself from the programs of the region and the nation. On the contrary, the institutions will actively participate in these programs, making a contribution where appropriate while drawing the dividends that may accrue from participation. But emphasis will remain on serving the people of South Carolina, on building strong institutions that meet the needs of the state.

The essential elements of a workable structure of higher education already exists in the state, with two year institutions, state colleges, and three universities serving general, technical and health needs - a three-tier system. The role of the universities is to offer professional and graduate programs of the highest quality, also emphasizing research and public service and undergraduate programs for students with above average potential. The state colleges provide basic liberal arts and science programs and a limited range of professional programs, usually including education and business administration. Graduate work should be offered only at the master's level, in specialized areas such as education, and usually of a continuing education nature. State colleges should be open to those high school graduates who have demonstrated a reasonable ability to perform college level work. The teaching role of the two year institutions is twofold: to provide a wide range of occupational programs related to society's needs, and to offer two year college parallel programs within commuting distance of as high a proportion of high school graduates as can be reached within the state's financial ability to support them. Students should be admitted to the two year institutions under criteria less stringent than those at state colleges and universities, and remedial curricula should be offered for those students who need to improve their ability to perform satisfactorily in college level courses. Costs to students at such institutions should be as low as possible.

All public institutions should carry on public service and continuing education functions appropriate to their individual capacities. Colleges are well equipped to provide cultural and general education programs on a community basis, and related evaluation and research should involve the universities.

The Commission on Higher Education's specific role as the coordinating agency for post-high school education in the state requires that its statutory authority be made more adequate. A basic and competent staff has been developed, procedures established, and basic approaches formulated for program evaluation, budgetary analysis and capital requirements analysis for the public colleges and universities. Small additions to the staff are necessary in the student affairs and management information areas, but, in addition, more appropriate delegation and delineation of authority is essential in the areas of budgetary control and permanent improvements coordination. Experience in other states reveals that the alternative to effective coordination is likely to be a governing board, which would restrict the governance of individual colleges and universities.

Recommendations

Enrollments and Admissions

It is projected that college enrollments will increase substantially during the decade in South Carolina but that the state shall continue to be below national and regional norms in the proportion of college age youths in college. Improvement of the two year higher education system would undoubtedly move the state closer to such norms of college attendance.

Admissions policies should differ among types of institutions so that in general the best qualified students attend universities. In turn admissions criteria should be higher in the state colleges than in the two year institutions. Criteria should be higher for nonresidents than for South Carolina residents, but quota systems for out-of-state students should be avoided unless excessive enrollments occur in this group of students.

Credits should be transferrable between public institutions and also from accredited technical education centers, provided courses are comparable. All colleges and universities should apply liberal standards in awarding credit for relevant work taken outside the classroom.

It is recommended:

that enrollment maxima be established at both Clemson University and the University of South Carolina; specifically that Clemson University limit main-campus headcount enrollment to no more than 10,000, and the University of South Carolina no more than 18,000 by limiting freshmen enrollment to 2500; and that both institutions maintain these limits by more rigorous admissions criteria at the undergraduate level;

that the admissions criteria for main campus admissions to baccalaureate degree programs at the two senior universities be increased relative

to those in state colleges;

that the admissions criteria for the senior universities' branches and centers be reduced below present criteria and below those obtaining for the state colleges, so as to encourage a broader spectrum of abilities and aptitudes among applicants; it being presumed that remedial curricula not carrying baccalaureate-level credit will be made available to those students admitted under such reduced standards;

that the admissions criteria for nonresidents at all public colleges and universities be increased relative to those obtaining for South Carolina residents, but that specific quota allocations be avoided;

that a firm policy be adopted by all public institutions permitting any student to transfer credits, up to the maximum permitted by then existing accrediting association policy, between public institutions, provided only that the cumulative grade point ratio of the transferred block of such credits be 2.0 or better on a 4.0 scale; and without reference to existence of similar courses in the institutions to which credit is transferred;

that credits earned toward the Associate in Applied Science degree from accredited Technical Education Centers be accepted for transfer to the public colleges and universities under the same conditions, regulations and procedures as from other accredited institutions of higher education, and that non-comparable college-level technical courses be accepted for transfer as electives;

that high schools or combinations of high schools offer each year a complete spectrum of curricula appropriate to the College Entrance Examination Board's Advanced Placement Program.

that all public institutions of higher education formally subscribe to the Advanced Placement Program, allowing full credit for courses with acceptable grades presented by candidates;

that each public institution adopt and publicize a policy of admitting students as regular freshmen who by the end of the eleventh grade have accumulated the requisite secondary units with appropriate grades and with appropriate standardized test (SAT) scores;

that each public institution publicize and make more readily available regular freshman courses to twelfth-grade students on a "special-student" basis, regular credits earned as such to be credited to the student on admission, or available for transfer to any other accredited institution on an official transcript;

that all public institutions of higher education offer full credit for candidates presenting acceptable grades on tests given under the College Level Examination Program, and that all make available to applicants the CLEP battery of tests;

that all public institutions of higher education grant full credit for those United States Armed Forces Institute courses completed with satisfactory grades;

that all public institutions of higher education grant credit for experience in military service when it can be shown to be equivalent to college courses.

Academic Programs

The objective is to provide a wide range of teaching, research and public service programs necessary for personal development of citizens and essential to meet the needs of society for educated and trained people. At the same time proliferation of courses and unnecessary duplication of programs should be avoided, and quality must be constantly emphasized. It is imperative, therefore, not only that new programs of the public colleges and universities be approved by the Commission on Higher Education to achieve these objectives but also that all programs be reviewed periodically to ensure that only relevant and needed programs are supported.

Programs should be conducted at each institution on the basis of its assigned role. Doctoral programs and major research efforts should be limited to the universities; and state colleges should offer only limited master's programs, usually of a continuing education nature. Remedial programs should be carried out primarily in two year institutions, with some effort to meet special needs at some of the state colleges. Whenever feasible, graduate, public service and research programs should involve cooperation between institutions.

It is recommended:

that the statutory authority creating the Commission be amended to authorize the Commission to withdraw approval of existing programs which are shown to be unnecessarily duplicative, insufficiently productive, or no longer required;

that the restrictions on males attending Winthrop be removed and that men be admitted to the College on a commuting but otherwise co-equal basis;

that a Graduate Center be formed in Charleston, details to be developed by the Charleston Consortium Steering and Policy Committees for submission to the Commission for approval.

Financing Higher Education

Higher Education, both in South Carolina and the nation, has become a heavy financial burden, with expenditures rising even faster than the substantial increases in enrollments. The question of "Who pays?" is consequently being increasingly emphasized as the burden on parents and taxpayers becomes heavier. The plight of the private colleges, whose expenditures have risen faster than their financial base while faced with competition from subsidized public institutions, is also receiving attention.

It is essential that the increased needs of higher education in South Carolina be met with maximum efficiency. To that end the Commission is

recommending a formula budgeting system, continuation and expansion of its management information and cost evaluation system and improvement in productivity at public institutions. It is anticipated that tuition and fees at public institutions will continue to rise and that increased appropriations will be forthcoming from higher state revenues resulting from economic growth of perhaps 10% per year.

It is recommended:

that for 1973-74 and subsequent years, improved versions of the Appropriations Formula become the primary basis for determining the amount of state support to be received by the state colleges and universities;

that there be greater standardization of tuition and fee schedules among the universities and colleges;

that changes in tuition and fee levels subsequent to final appropriation in accordance with the Appropriation Formula, require approval of the Commission and the Budget and Control Board;

that the colleges and universities be exempted from preparing appropriation requests in the current manner.

Facilities

The state colleges and universities have conducted extensive building programs during the past decade and are generally in a viable condition in terms of space needs. Specific needs for the decade of the 1970's are for academic space to allow for enlarged enrollments, continuation of construction of basic campus facilities at Francis Marion College and the College of Charleston, and additional health education facilities.

These facilities can be financed in part through tuition revenues. The balance of the costs should be financed under the general improvement bond program by amending the Capital Improvement Bonds Act. A system of evaluation of individual capital projects on a one and five year basis has been developed by the Commission on Higher Education. In considering projects

for approval careful evaluation will be made not only of the necessity of the space but also the possible utilization of other public facilities.

It is recommended:

that the State Capital Improvement Bonds Act be amended to provide an additional \$50 million by 1975 for the public institutions of higher education.

Faculty

It is recognized that the most important single element in the quality of higher education is faculty effectiveness. In order to recruit, retain and motivate well qualified faculty members, they must play an essential role in determination of academic policies and receive compensation and fringe benefits of a competitive nature. Appropriate written policies pertaining to tenure, leave, promotion, role and scope of faculty in governance, etc., must be established and implemented.

It is recommended:

that each institution utilize an objective evaluative instrument on a periodic basis to determine faculty effectiveness; that in the development of this instrument faculty and administrators reach consensus in regard to the criteria to be employed; that student evaluation of instructors in terms of the instructors' effect on the student be a part of the criteria; and that these evaluations be used in conjunction with other criteria to determine merit increases, promotions, and tenure;

that each public institution through the joint efforts of administration and faculty develop policies and procedures designed to assist recruitment of qualified faculty;

that there be increased emphasis on the counseling of students at all institutions and the faculty accept academic advisement as a part of their assignment;

that legislation be enacted which would offer faculty members at

public institutions options in participating in the Teachers Insurance Annuity Association - College Retirement Equity Fund (TIAA-CREF) and the South Carolina Retirement Program;

that the State Personnel Division prepare a uniform package program covering medical, disability and travel insurance, and that the state pay some portion of the premium cost for this coverage for all full-time faculty members;

that each institution develop policies for faculty (and principle administrators) covering sabbatical leave, leave for graduate study, leave without pay, leave with pay, sick leave and military leave;

that all public institutions prepare written guidelines on political activity and outside work and that applicants for faculty positions be provided these guidelines;

that the faculty of the department be actively involved in determining budget recommendations of that department; that faculty have the opportunity to recommend individuals for the positions of department head, academic dean, and president; and that all institutions permit representatives from the faculty (and from the student body) to attend meetings of boards of trustees;

that each institution develop written policies on tenure and promotion and make these policies known to all parties concerned.

Student Aid

There is little doubt that financial restraints represent a significant factor in keeping many capable South Carolinians from college, and thereby explain in part the low college attendance rate of the state. Federal student financial aid programs have closed some of the difference between rising costs and family resources but there still is a substantial gap to be filled.

To remove financial barriers to higher education requires positive action by the state. Such an effort includes a program of state-funded grants

and improvement of the existing state-assisted Guaranteed Student Loan Program and of the system of state grants to students furthering their education in special programs outside the state. The present tuition grants program for students attending private colleges in the state should be greatly strengthened once the prohibition against indirect aid to sectarian institutions in the state constitution is removed.

All state programs of student aid should be formally coordinated through the Commission on Higher Education to provide for greater effectiveness and comprehensiveness.

It is recommended:

that the State Constitution be revised to remove the prohibition against indirect aid to sectarian institutions;

that a state-funded program of non-repayable grants to needy undergraduate students be established;

that such a generally available grants program supplant the existing Tuition Grants Program which is more restrictive in scope;

that the Education Assistance Authority provide for student loans at an annual lending level of at least \$2.5 million;

that the ongoing program of state grants to students electing to go out of state in furtherance of the education be revised and strengthened;

that all state level administrative and fiscal responsibility for new programs of student aid reside with the Commission.

Libraries

Physical facilities for library use are most adequate among most public and private institutions of higher education in the state. As has been realized for some time, however, learning resources in South Carolina college and university libraries are below nationally accepted norms and comparable institutions in neighboring states. Current financing for library resources must be stepped up and substantial financial support is essential

for catch-up purposes.

Considerable effort is also necessary to upgrade library staffs, to include additional educational and training programs. The new Library School at the University of South Carolina provides a valuable resource and should be adequately supported.

Satisfactory efforts are being made to collect and make available publications of the federal government and a similar system is desirable and should be established for state publications.

It is recommended:

that the General Assembly enact special appropriations of \$1.5 million per year for the remainder of the decade for library purposes, to cover all state supported institutions of higher education;

that institutions ensure that financial support is available to procure library holdings in adequate number;

that South Carolina adopt a Documents Depository Law which will provide for the collection, listing, and distribution of state publications to designated depository libraries around the state;

that institutions develop formal policies and procedures for retaining written material of potential historical importance;

that institutions ensure that financial support is available to employ well-trained library personnel in adequate numbers at competitive salaries;

that institutions stimulate greater use of their library resources;

that institutions increase inter-library cooperation and expand the categories of personnel benefitting from such cooperation.

Continuing Education and Public Service

Recognition of the fact that education is a life long endeavor leads to the necessity by the state of providing higher educational opportunities for citizens of all age levels and educational backgrounds. Such efforts should utilize creative methods to include use of the most modern educational media. This will require a significant expansion of the current activities of public colleges and universities and more careful coordination at the state level.

The unique and impressive resources of higher education in the state must also be utilized in a variety of ways to raise the whole level of life in South Carolina. Such methods as applied research on public problems, technical assistance to state and private agencies, and encouragement of community involvement in art and music illustrate the wide variety of actions possible. Appropriate budgetary support for public service activities of high priority will serve the public interest very well.

It is recommended:

that immediate priority be given to the development of pilot programs to provide, via ETV, credit courses which are needed by the teachers of this state to maintain certification;

that concurrent development of a broadcast (open circuit) pilot program be accomplished to ascertain the interest in and demand for freshmen and sophomore level credit courses offered via ETV.

Two Year Post-High School Education

There is an evident need to expand opportunities for South Carolina high school graduates to attend relatively open admission two year institutions of higher education if the state is to keep pace with others in providing higher education opportunities for the people. These two year centers should be within commuting distance of most of the high school graduates and within the financial ability of students to pay the fees required. The present

systems of regional campuses and TEC centers are serving useful functions but improvement is necessary to broaden opportunities for the youth and to improve the state's low rate of college attendance.

A study committee from the Commission and the State Committee on Technical Education has recommended that a comprehensive community college system be established as quickly as possible. The Commission approves this general concept but recommends that this objective be approached by turning over the overall responsibility for two year post high school education - except for the present university branches and centers, which would be limited to their present status - to a new Board. The new Board would take over the present functions of TEC and would expand activities based on local needs and within the overall structure of higher education in the state.

It is recommended:

that a new state board be created to replace the State Committee for Technical Education, and that the Chairman of that new board be empowered to sit ex officio as a member of the Commission on Higher Education, and that the new board bear the same relationship to the Commission on Higher Education as do senior college and university boards;

that the new board assume the governance of all existing institutions operated by the State Committee for Technical Education, but not the university branches and centers;

that after establishing criteria for the establishment of new, and the continuation of existing two year institutions, the new board may seek the approval of all the necessary authorities, where a local need exists, to create comprehensive institutions either by the addition of lower-division college curricula to Technical Education Centers, or by merging two or more public two year institutions, or by the addition of occupational and vocational curricula to a university branch or center.

Medical Education

An intensive study of medical education was made by a special committee out of concern for the facts that South Carolina has a low ratio of physicians to population and basic health deficiencies. The basic question addressed by the Committee is whether the medical education needs can be met at the Medical University or whether a second medical school is necessary at this time.

The conclusion arrived at by the Committee and concurred in by the Commission is that the state should set as a goal achieving the national median of physicians per population of 130 per 100,000 people. This should be approached first by giving support for increasing the output of physicians by the Medical University and especially by encouragement of the development of regional health education centers. If within a reasonable time it appears that the state's needs cannot be met through educational activities at the Medical University the question of a second medical school should then be reconsidered.

It is recommended:

that regional health education centers be developed as expeditiously as possible;

that the number of students accepted in the first year classes at the Medical University of South Carolina be limited to the ability of MUSC to provide the necessary number of teaching beds under its control;

that a medical education supervisory mechanism be established under the Commission on Higher Education.

Private Higher Education

It is a well-known fact that private institutions in this state (and elsewhere) are under financial strain and are in grave danger of losing their effectiveness and place in the overall system of higher education. It must be accepted that state government has a responsible role in supporting

private colleges and thereby maintaining a valuable educational resource as well as reducing the costs to the taxpayer of higher education.

Elimination of the constitutional barrier to providing indirect aid to sectarian institutions has been recommended by the Commission on Higher Education. If this change is made then the tuition grants program may be strengthened, cooperation between public and private institutions can be increased and contractual means established to provide support to private colleges. In the interim every legal course should be followed to support this segment of the higher education system.

It is recommended:

that cooperative arrangements between public and nonpublic sectors of higher education be encouraged and that cooperative arrangements between institutions in the nonpublic sector be expanded;

that, until such time as a student grant program of more general applicability can be enacted, the funding levels for the Tuition Grants Act of 1970 be increased to assist those institutions not under sectarian control. Specifically it is recommended that \$200,000 be provided for 1972-73 and that this level of funding be increased to \$400,000 for 1974-75 and thereafter;

that the statutory authority creating the Commission on Higher Education be amended to establish a Committee on Nonpublic College Presidents as an advisory body for the Commission.

Organization for Higher Education

If the state resources available for higher education are to be employed in the most effective manner an effective coordinating agency is required. The alternatives are unrestricted competition between institutions or a governing board to provide centralized direction of activities. Neither provides a desirable alternative to reasonable autonomy for colleges and universities to permit on the ground management of resources with coordination

to eliminate needless duplication and self-serving competition. The effectiveness of the Commission on Higher Education must be improved.

It is recommended:

that the statutory authority creating the Commission be amended to provide that the number of members appointed by the Governor shall always exceed by one the total number of ex officio members;

that the statutory authority creating the Commission be amended to provide for submission of the budgets of public institutions of higher education initially to the Commission, for the Commission to hold open hearings on the budgets, and for the Commission to make budget presentations to the Budget and Control Board and the General Assembly on behalf of all institutions;

that the statutory authority creating the Commission be amended to require that all requests for capital improvements from public institutions of higher education initially be submitted to the Commission for review and transmittal to the Budget and Control Board.